EXAMINATIOIN OF ABDOMEN

Stand right side of patient And give salam

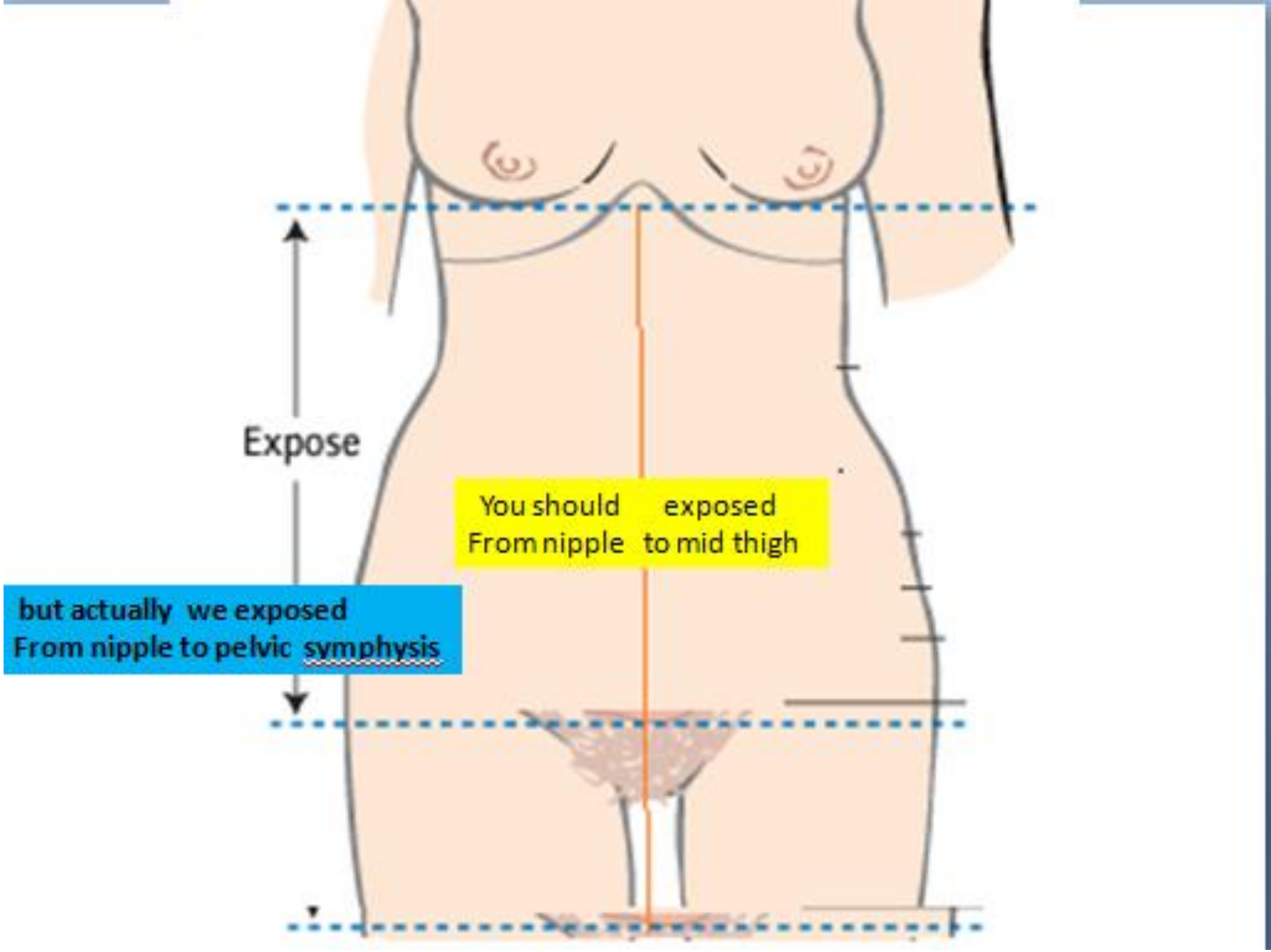
Introduced your self to the patient and take consent from the patient by telling that I m going to examination u for my purpose, it will not hurt u. can I proceed.

Examination of abdomen proper

- **Inspection**
- **Palpation**
- **Percussion**
- **Auscultation**

EXPOSURE

Now expose the patient from nipple to just above the symphysis pubis
(ideally : nipple to mid thigh)


Expose
You should exposed
From nipple to mid thigh
but actually we exposed
From nipple to pelvic symphysis

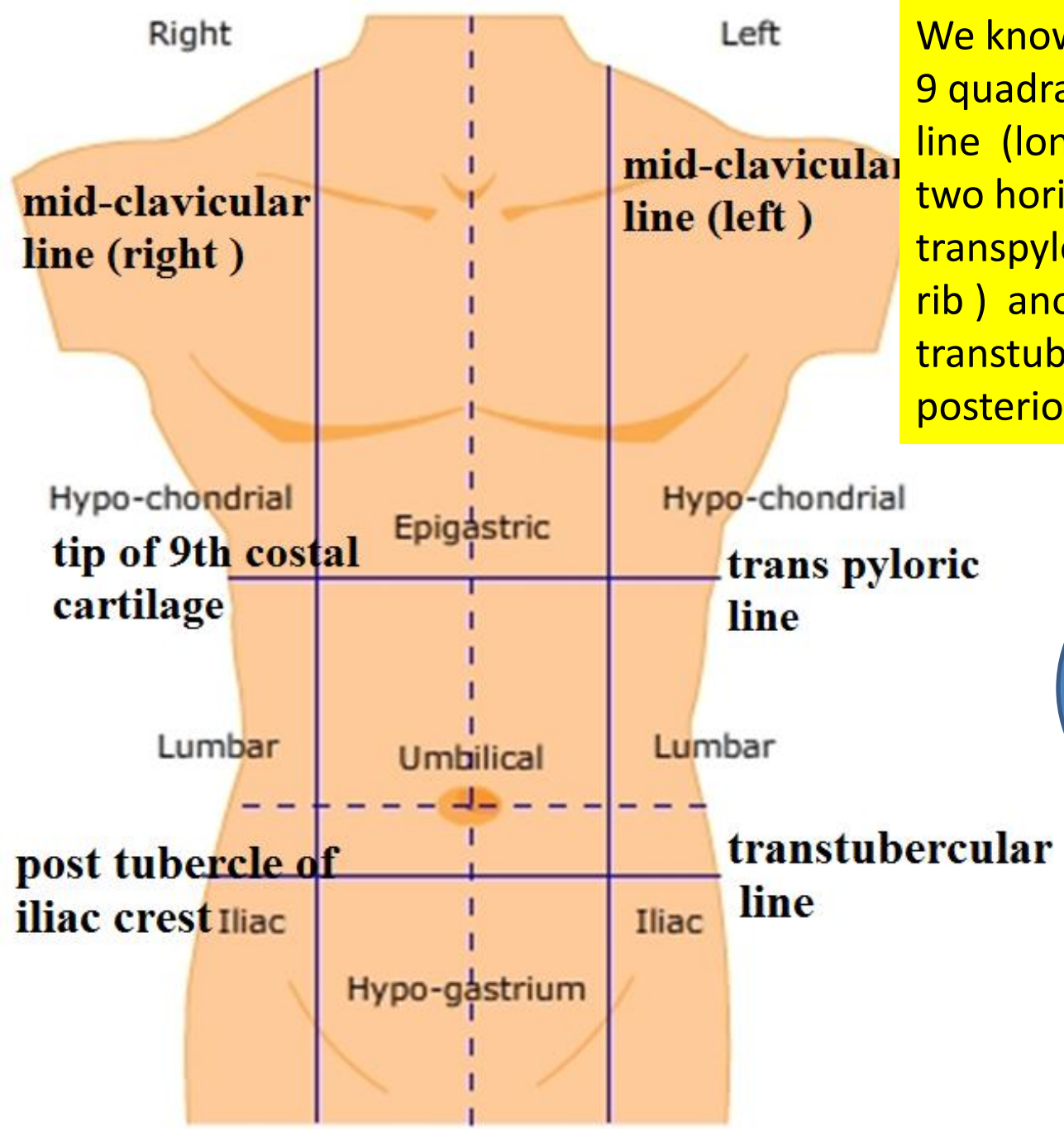
In examination you will expose like this

From nipple to pubis


INSPECTION

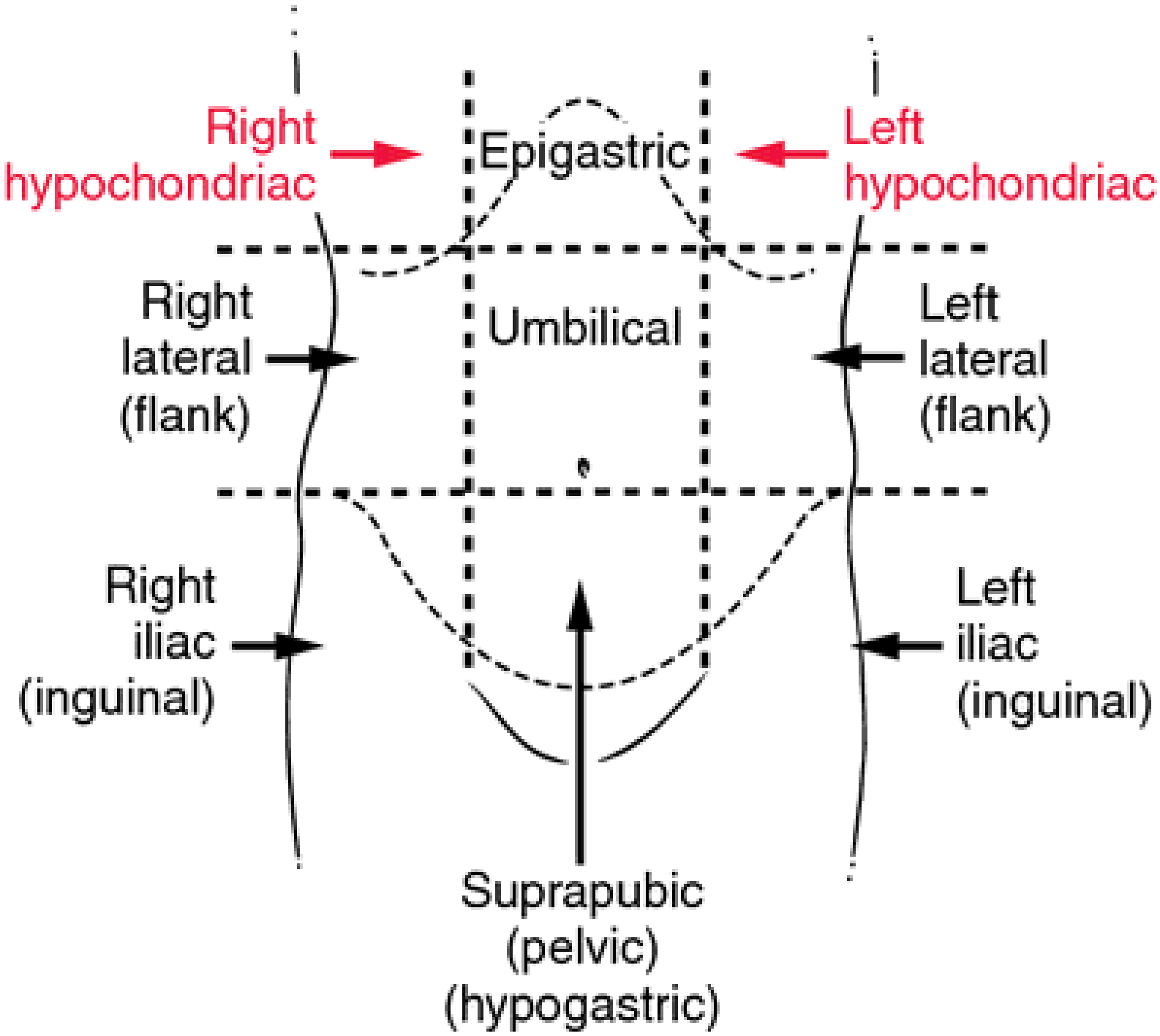
1. Size and shape of abdomen
2. Position of umbilicus
3. Flanks
4. Epigastric pulsation
5. Engorged vein
6. Body hair distribution
7. Scar mark
8. Pigmentation
9. Striae
10. Hernial orifice intact / not
11. External genitalia

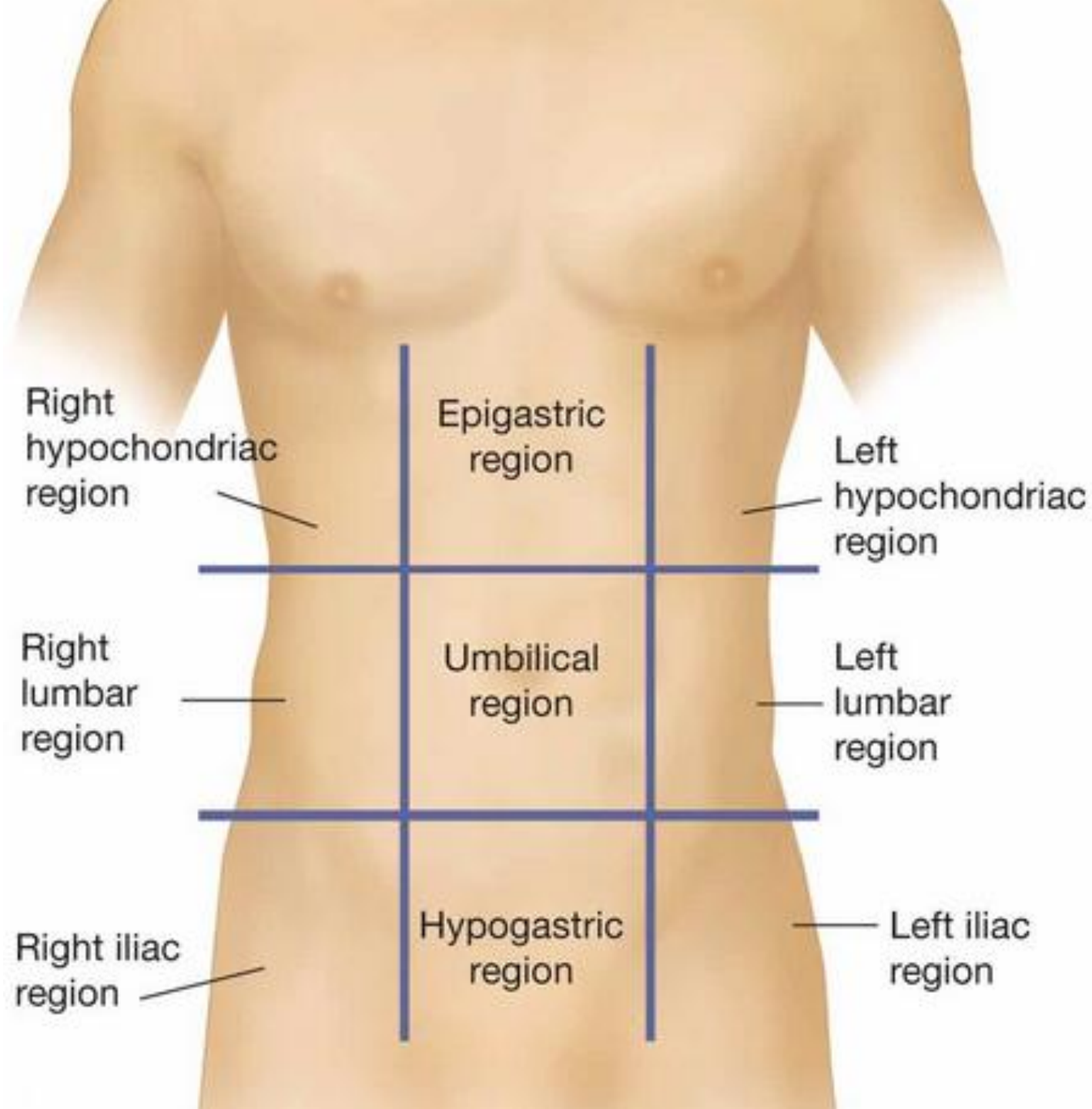
1. First stand look at the abdomen
2. Now sit down keep the eye al same level of to see the abdomino thoracic movement in respiration
3. search the things mention left

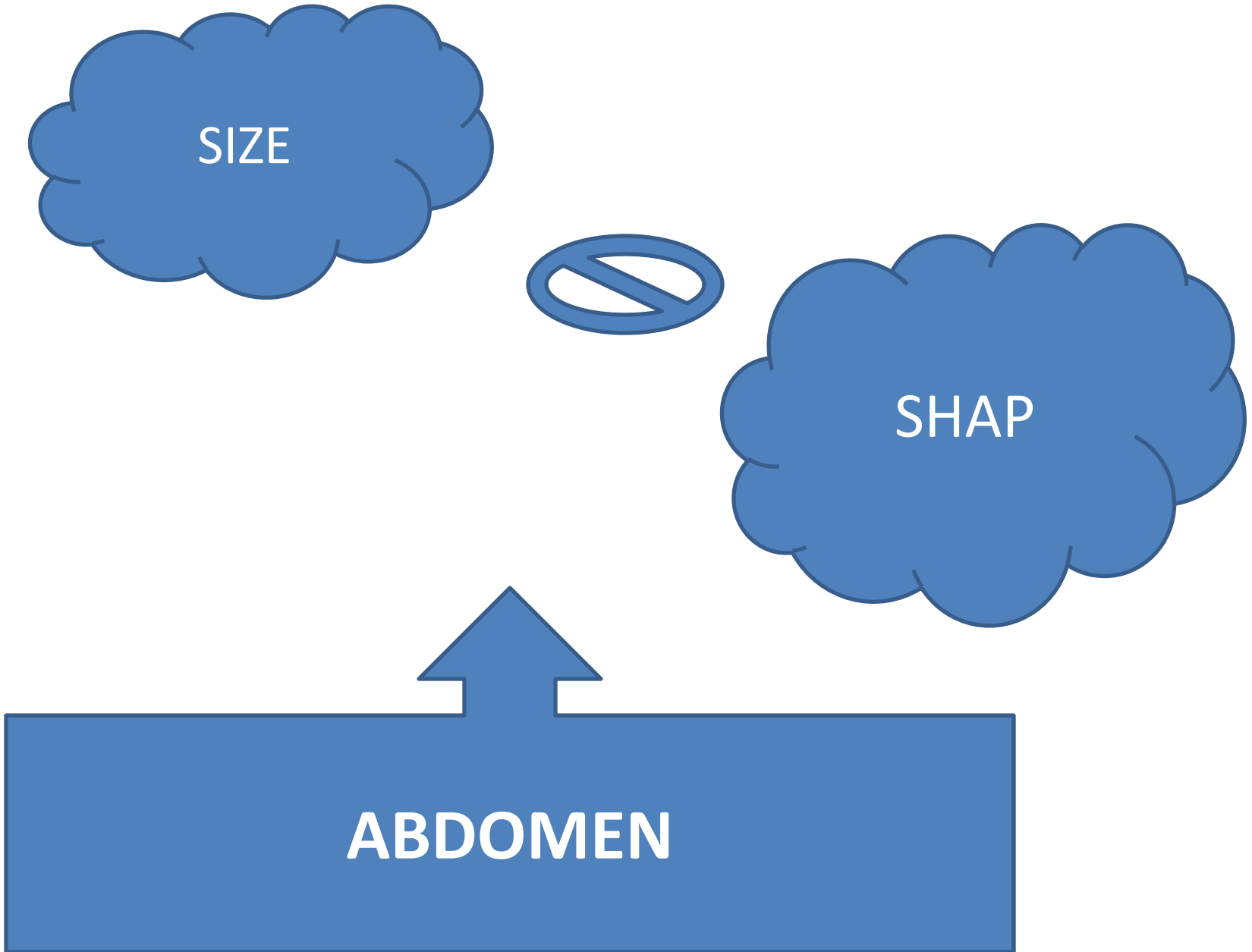


We know abdomen is divided in to 9 quadrant on the basis of 2 verticle line (long the midclavicular line) & two horizontal line one at transpyloric level (at the level of 9th rib) another is at level of transtubercular line (at level posterior tubercle of iliac crest)

QUADRANT ---9


Right
hypochondriac
Epigastric
Left
hypochondriac
Right
lateral
(flank)
Umbilical
Left
lateral
(flank)
Right
iliac
(inguinal)
Left
iliac
(inguinal)
Suprapubic
(pelvic)
(hypogastric)


Right hypochondriac region
Epigastric region
Left hypochondriac region
Right lumbar region
Umbilical region
Left lumbar region
Right iliac region
Hypogastric region
Left iliac region


SIZE
SHAP
ABDOMEN

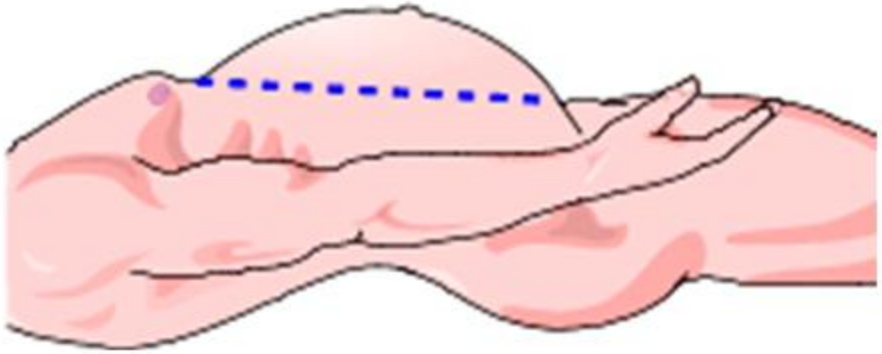
The abdomen is normally flat or slightly scaphoid and symmetrical

And it moves with respiration

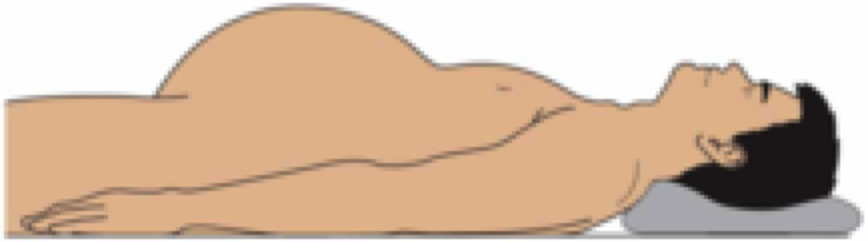
Abnormal size and shape of abdomen is

- Shrunken
- Distended
  - Generalized distension
    - Cause 5 F
      - F-fat, F-fluid, F-flatus, F-fetus, F –feces
  - Localized distension

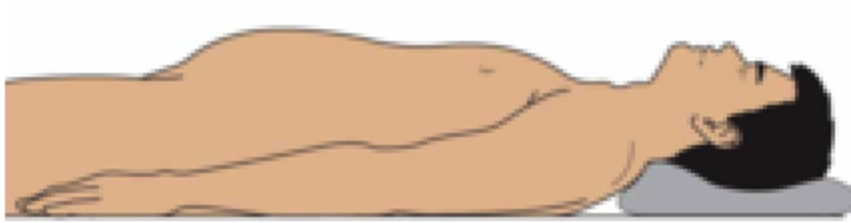
DISTENDED



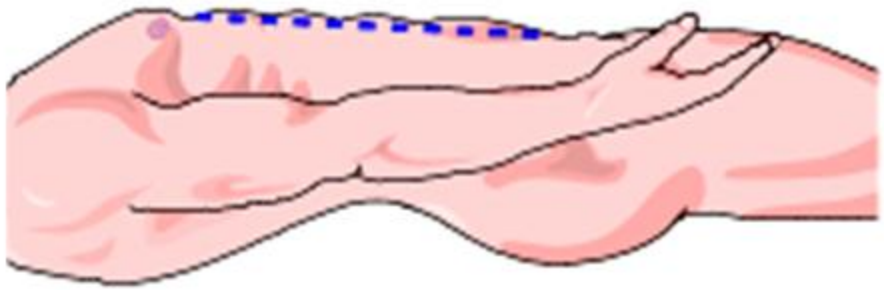
Distend



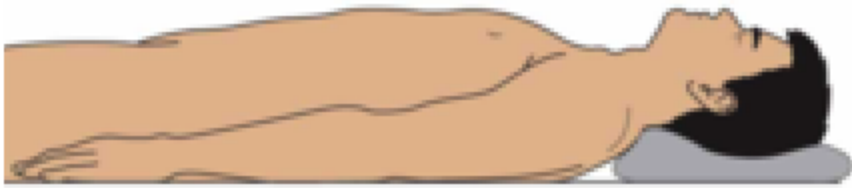
rounded



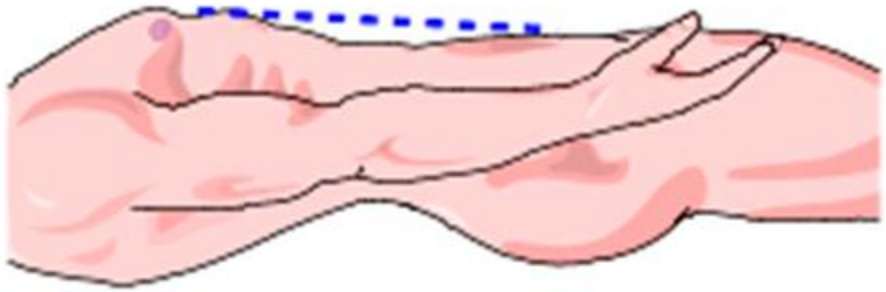
FLAT

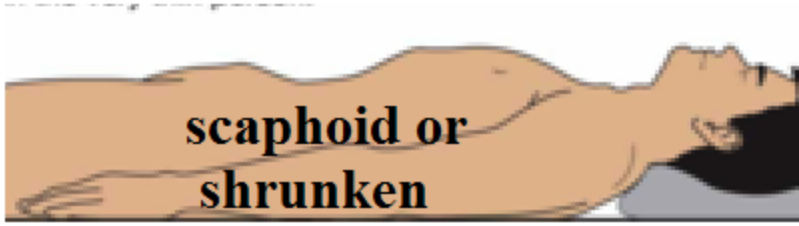


flat



SCAPHOID

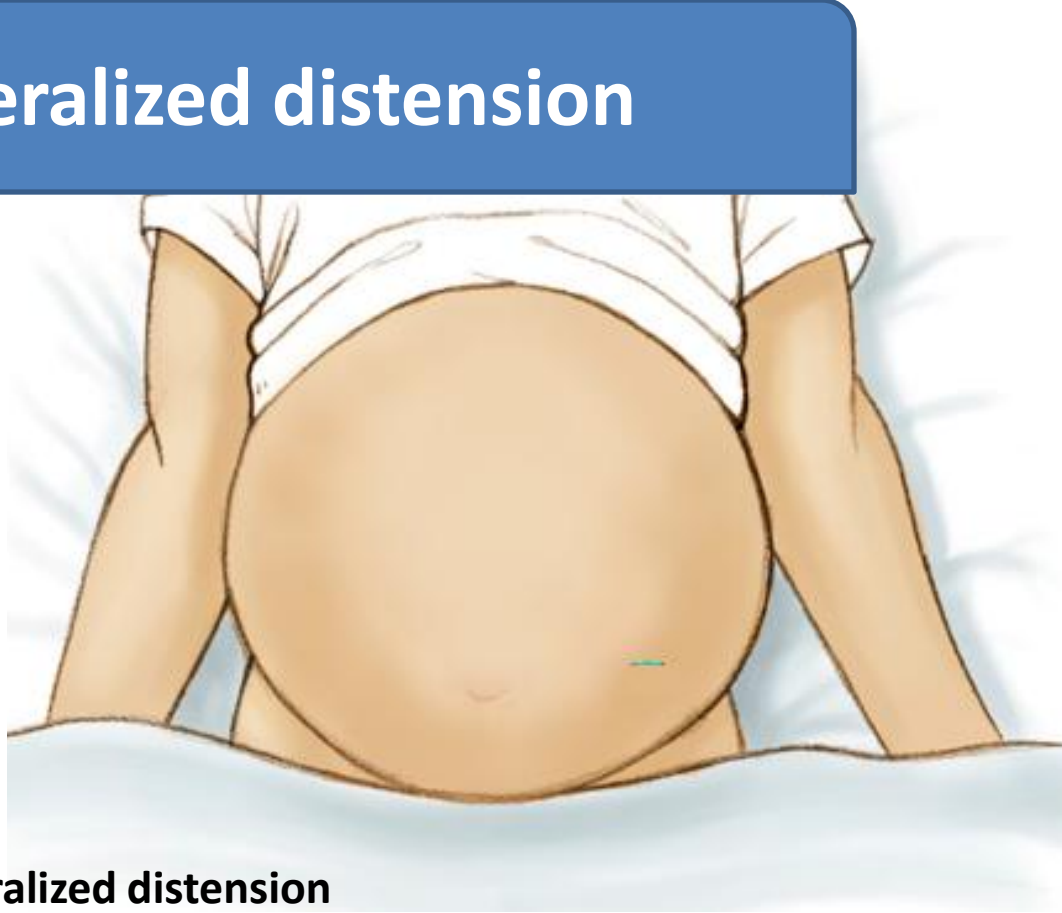




SHRUNKEN

Abdominal distension

Generalized distension



Generalized distension

Cause 5 F

F-fat,

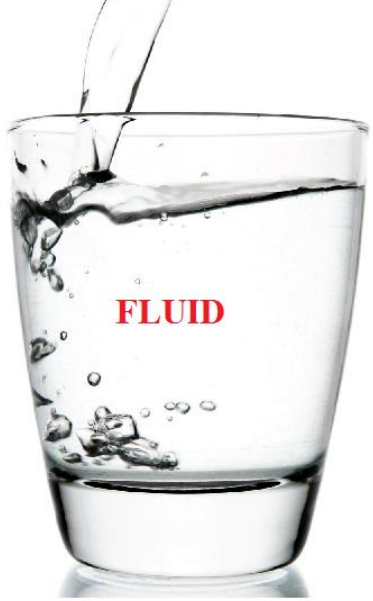
F-fluid,

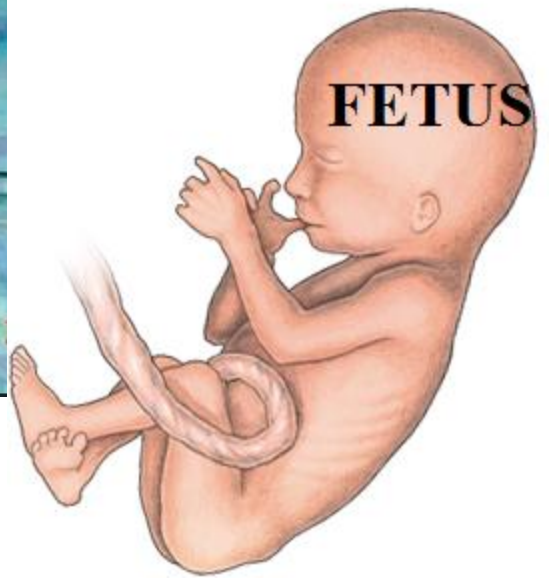
F-flatus,

F-fetus,

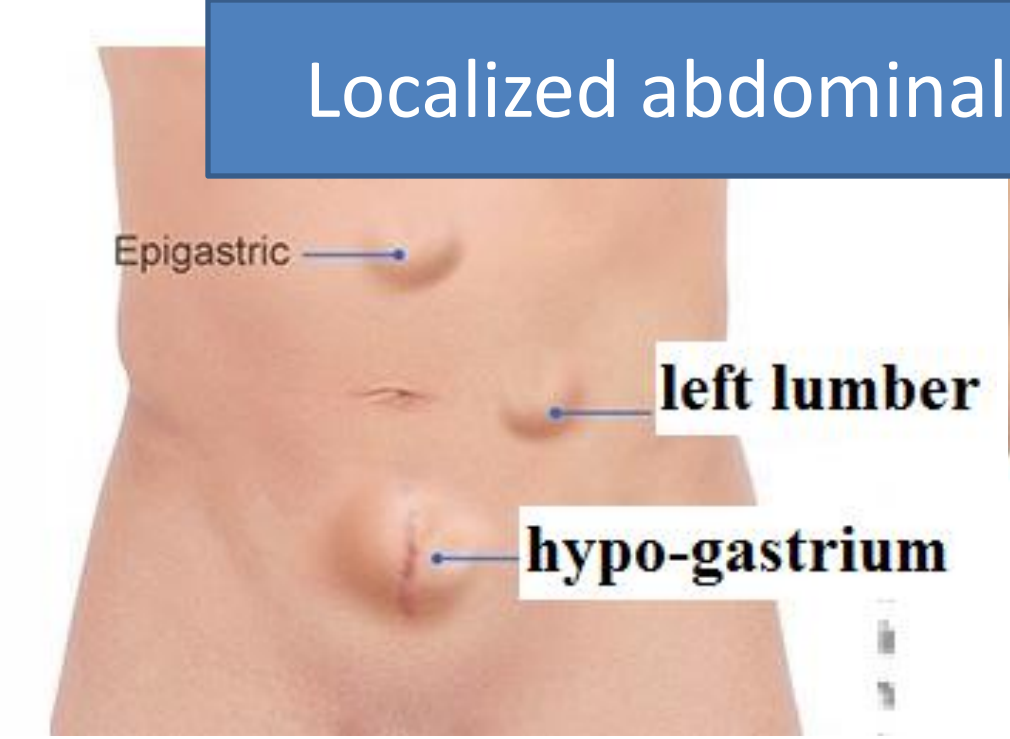
F –feces

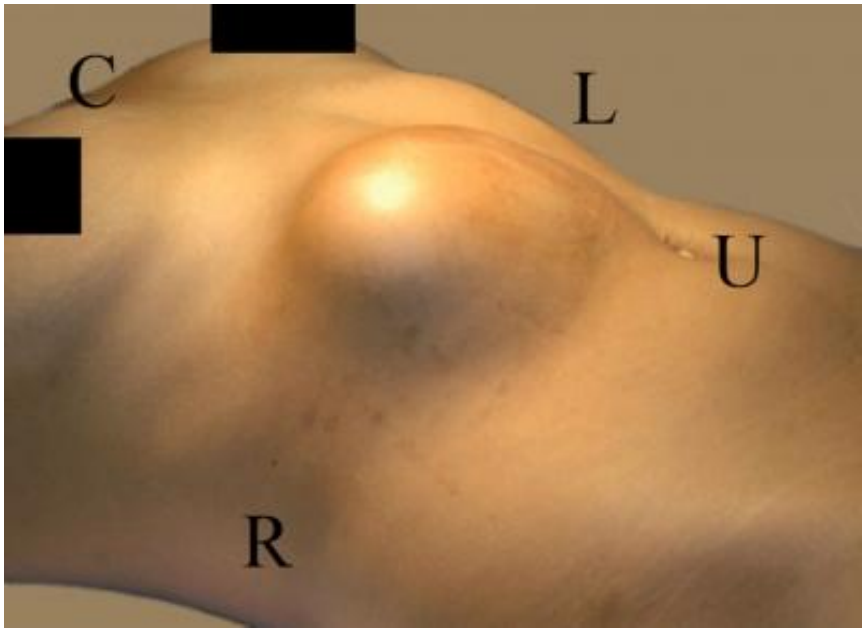
DD of generalized distension of Abdomen



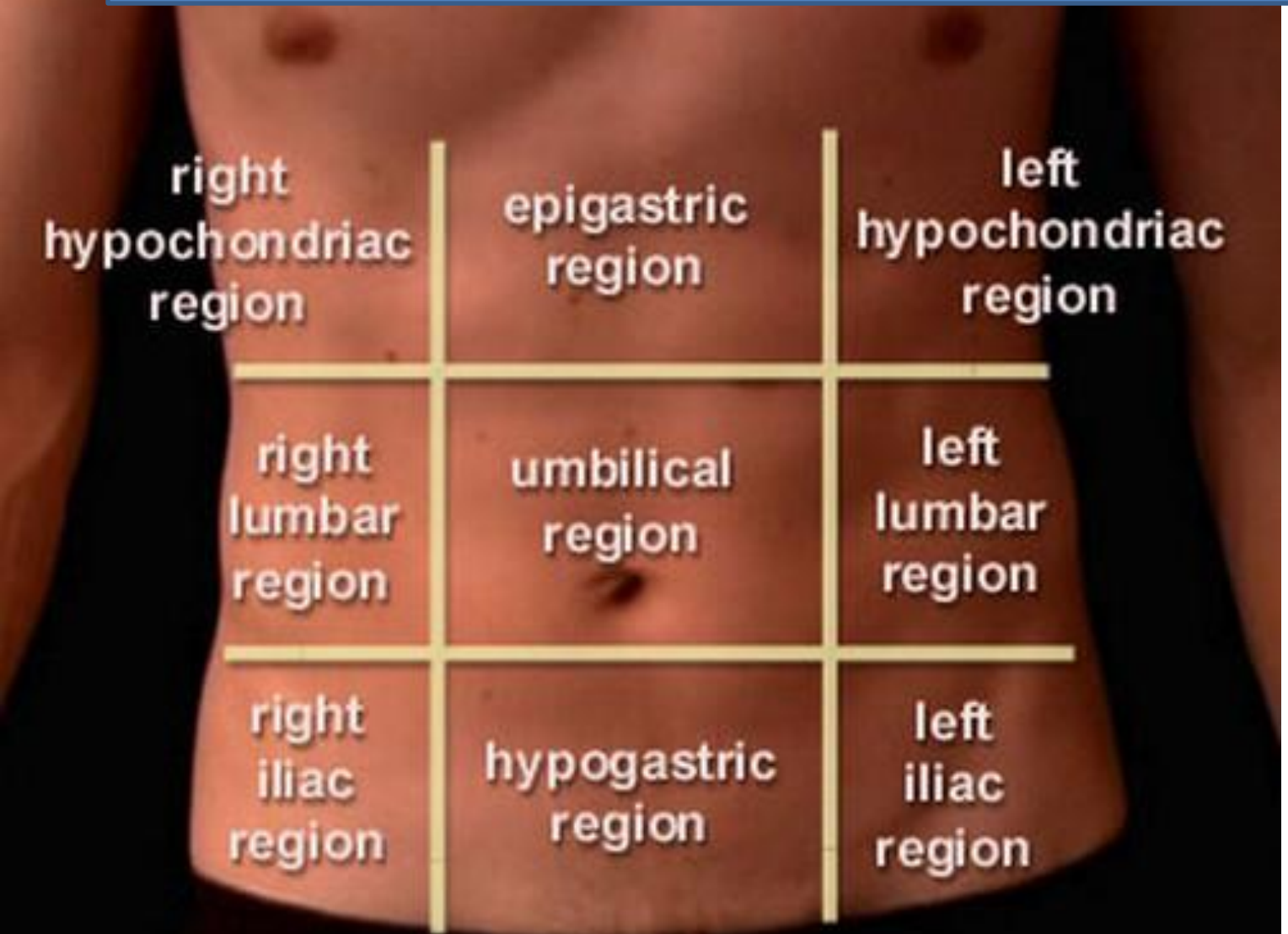


Localized abdominal distension





DD of localized abdominal distension or lump Depend on the different quadrant of abdomen

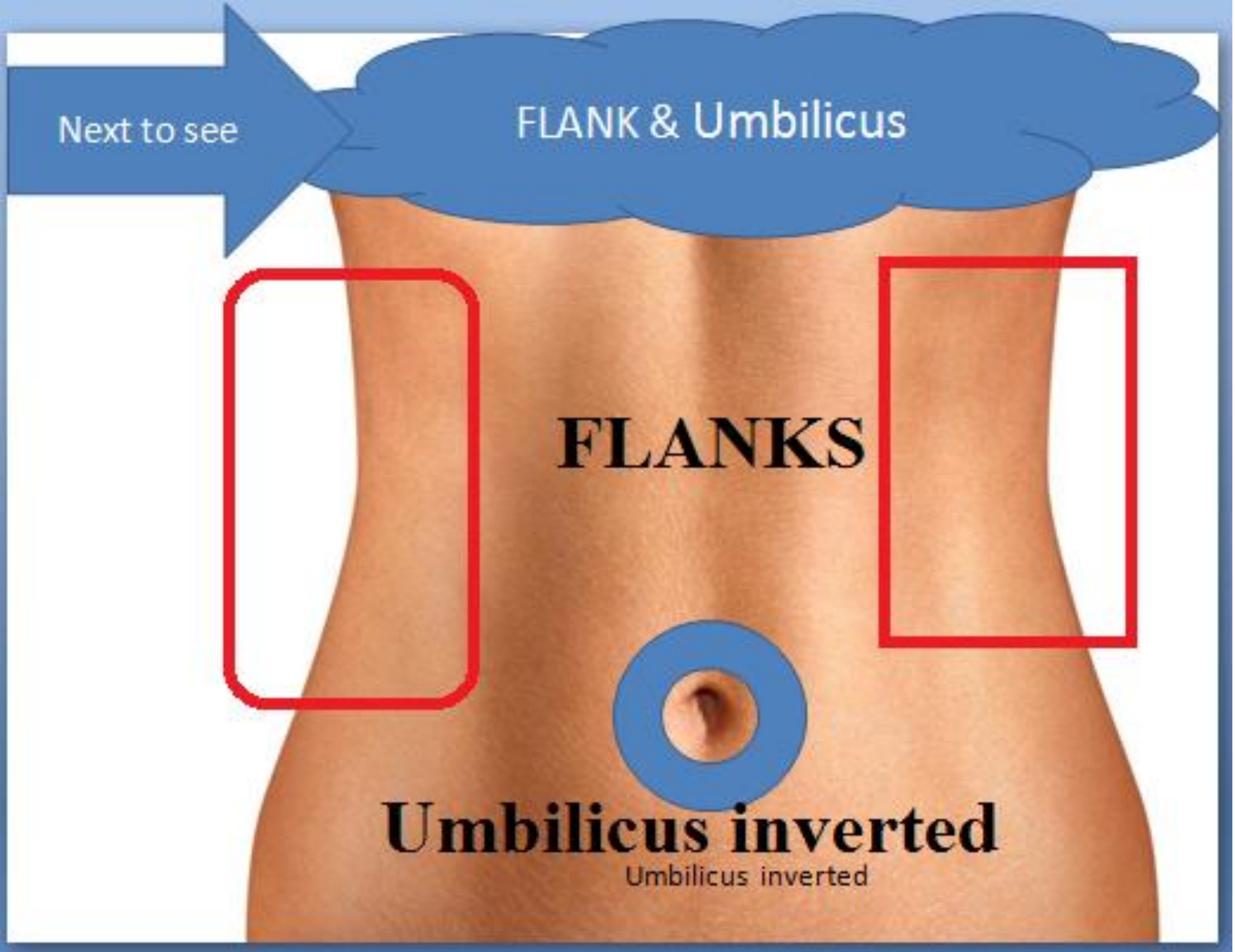


Right hypochrondium
• Enlarge right lobe of liver
• Distension of gall bladder
  ○ Mucocele of gall bladder
  ○ Empyma of gall bladder
  ○ CA gall bladder
• CA Hepatic plexus of colon
• CA of head of pancrease
	Epigastrium
	• Left lobe of liver
	• Ca stomach
	• Ca transverse colon
	• Lymphnode
		Left Hypochrondium
		Spleen
		CA of spleenic plexus
		Lymphnode

Mass in loin Enlargement of kidney • Hydronephrosis • Renal cell carcinoma • Wilms tumor—incase of child • Polycystic kidney • Pyeonephrosis	**Umbilicus** Umbilical hernia	**Mass in loin** Enlargement of kidney • Hydronephrosis • Renal cell carcinoma • Wilms tumor—incase of child • Polycystic kidney Pyeonephrosis
Mass in the right iliac fossa • Appendicular lump / abscess • Ilio-caecal TB • Ca colon	**Hypogastrium** In case of male Palpable urinary bladder In case of female • **Pregnancy** Tubo-ovarian lump • **Fibroid uterus** • **Ovarian tumor**	**Mass in the left iliac fossa** • Sigmoid colon cancer • Diverticular mass • Impacted stool in constipated patient • Lymphnode

Next to see

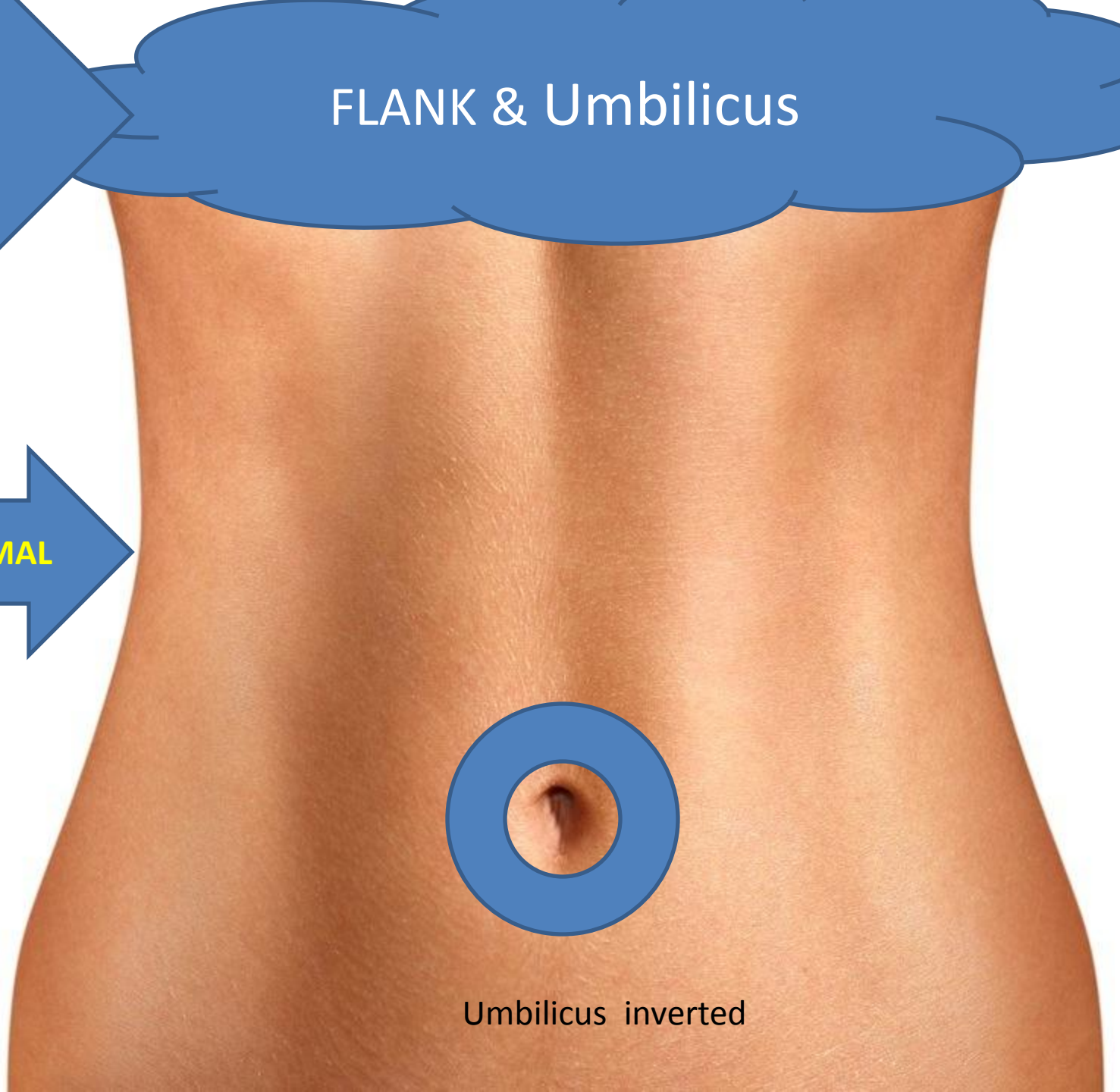
FLANK & Umbilicus



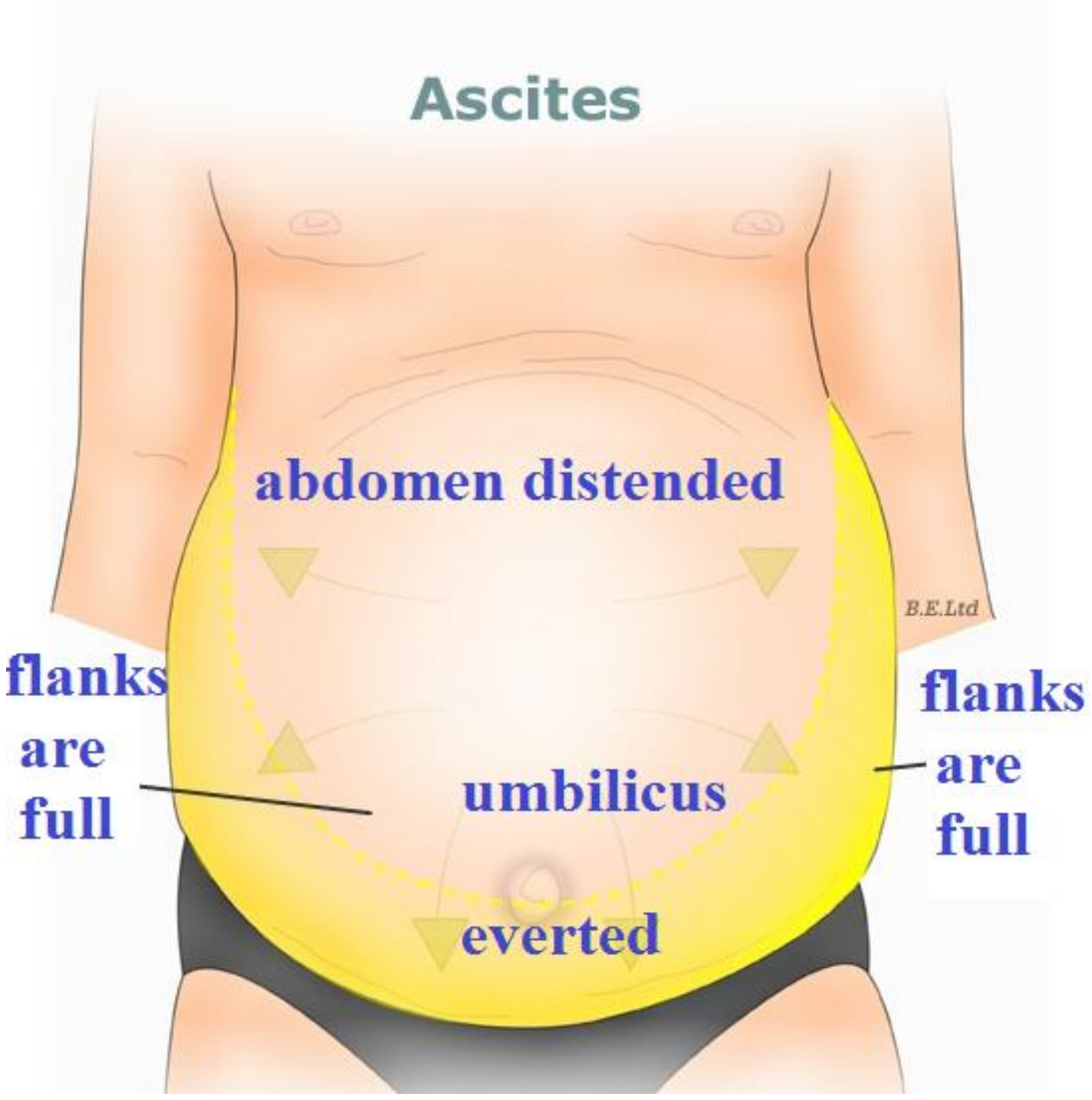
Next to see

FLANK & Umbilicus

FLANK NORMAL



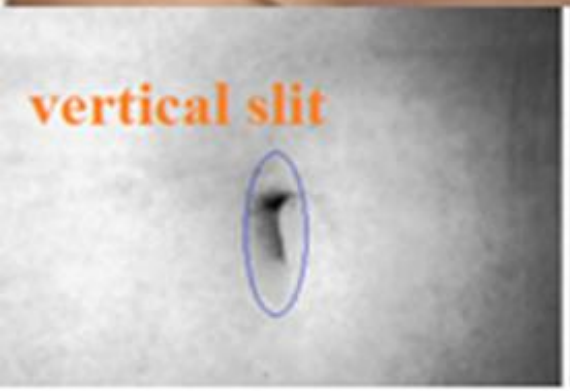
Umbilicus inverted

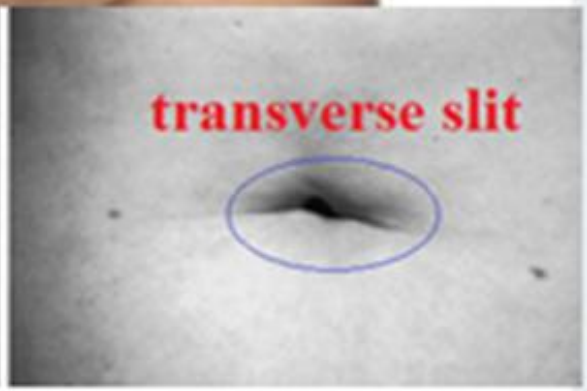

Ascites
abdomen distended
B.E.Ltd
flanks are full
flanks are full
umbilicus
everted

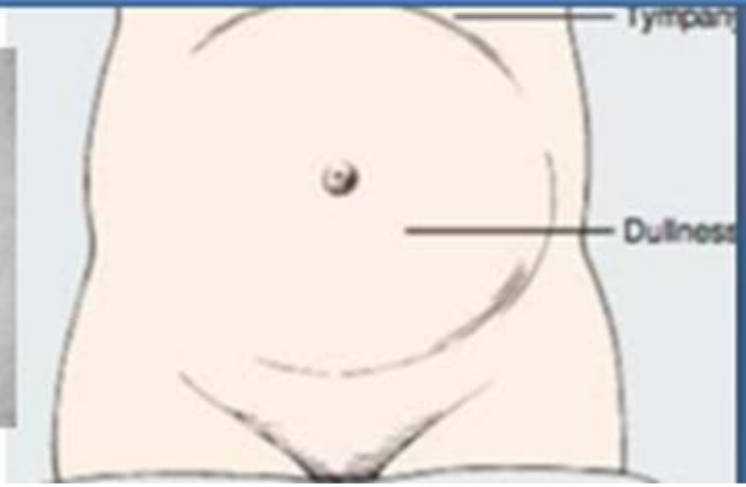
Position of the umbilicus

A. Central
B. inverted ---normally present
Or
Everted –in ascites and

Incase of everted umbilicus
you have to mention the slit
Transverse slit –ascites
Or
Vertical slit – umbilical hernia







EPIGASTRIC PULSATION

Epigastric pulsation

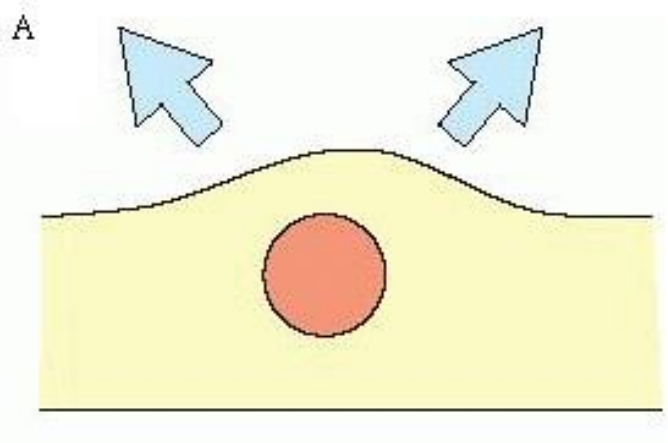
Epigastric pulsation are present or absent

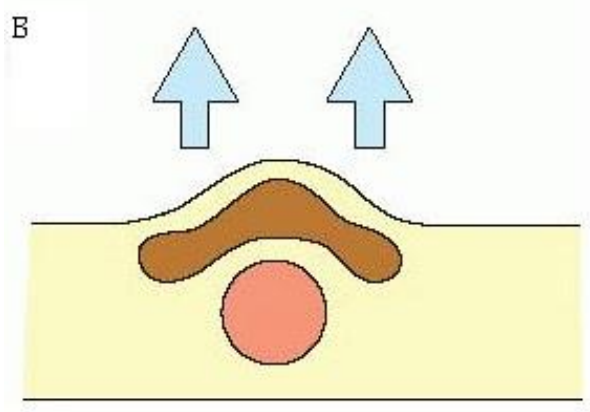
Tell the cause of epigastric pulsation:

- Aneurysm of abdominal aorta
- Right ventricular hypertrophy
- Lean and thin person
- mass overlying abdominal aorta
- pulsatile liver

How to differentiate between transmitted and expansile pulsations

Put two finger over pulsation side by side	
In self pulsatile/expansile	in that case your fingers will move outwards Picture A)
If the pulsation is transmitted through other tissue	in that case your fingers will move upwards picture B

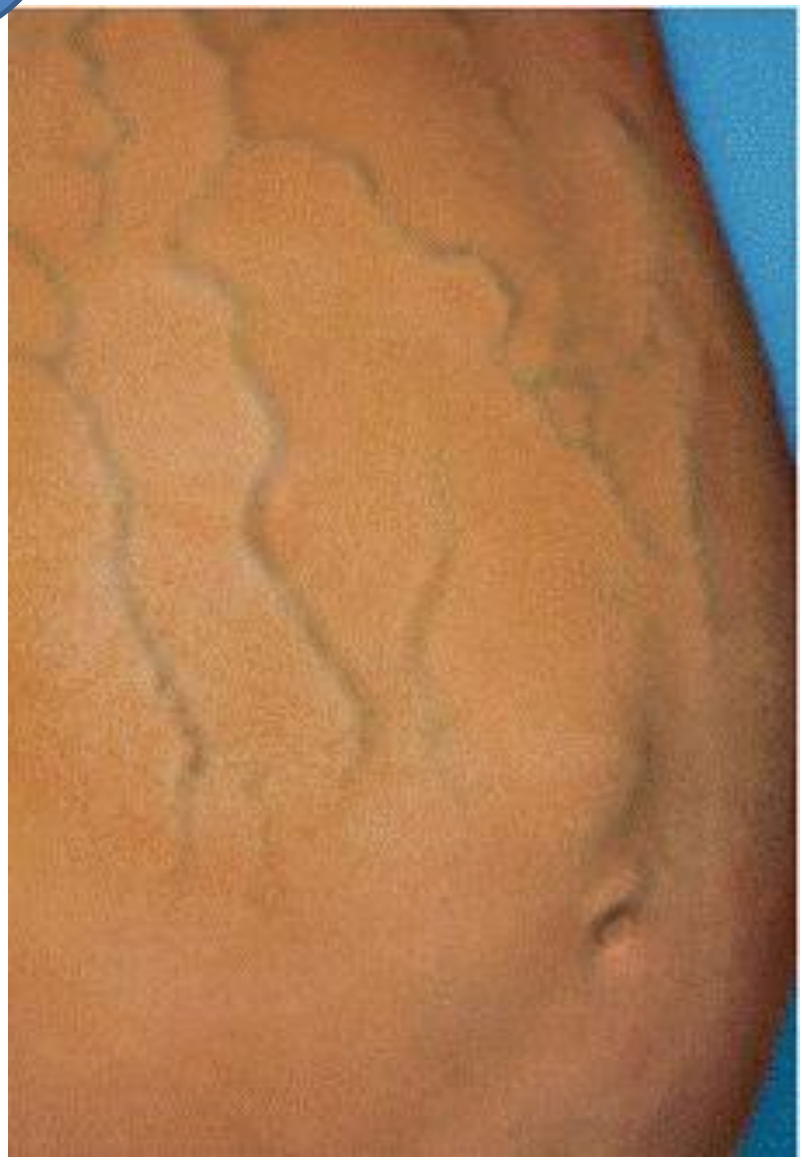




ENGORED VEIN

Engorged vein:

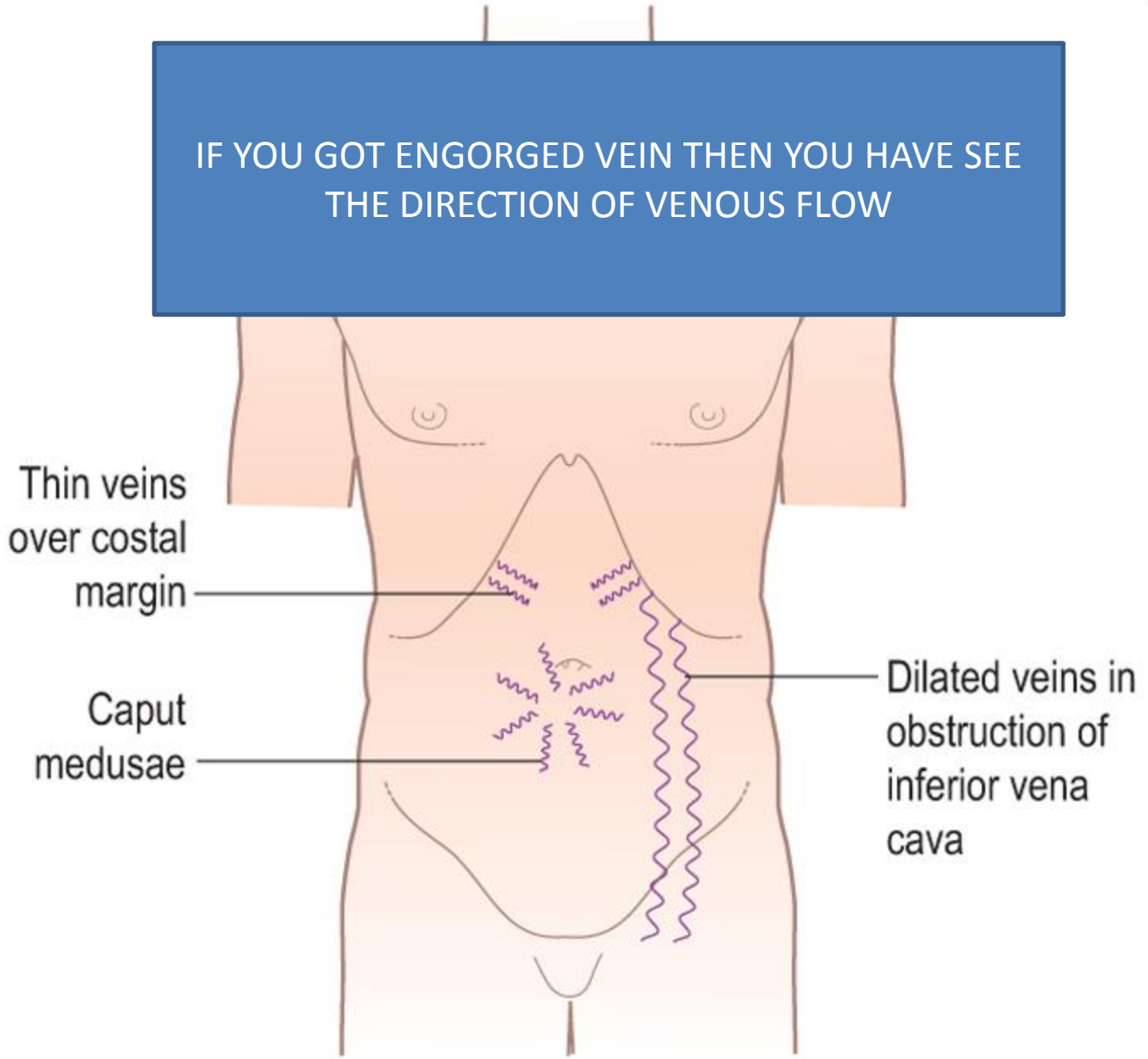
If get engorged vein u have to see the direction of that vein

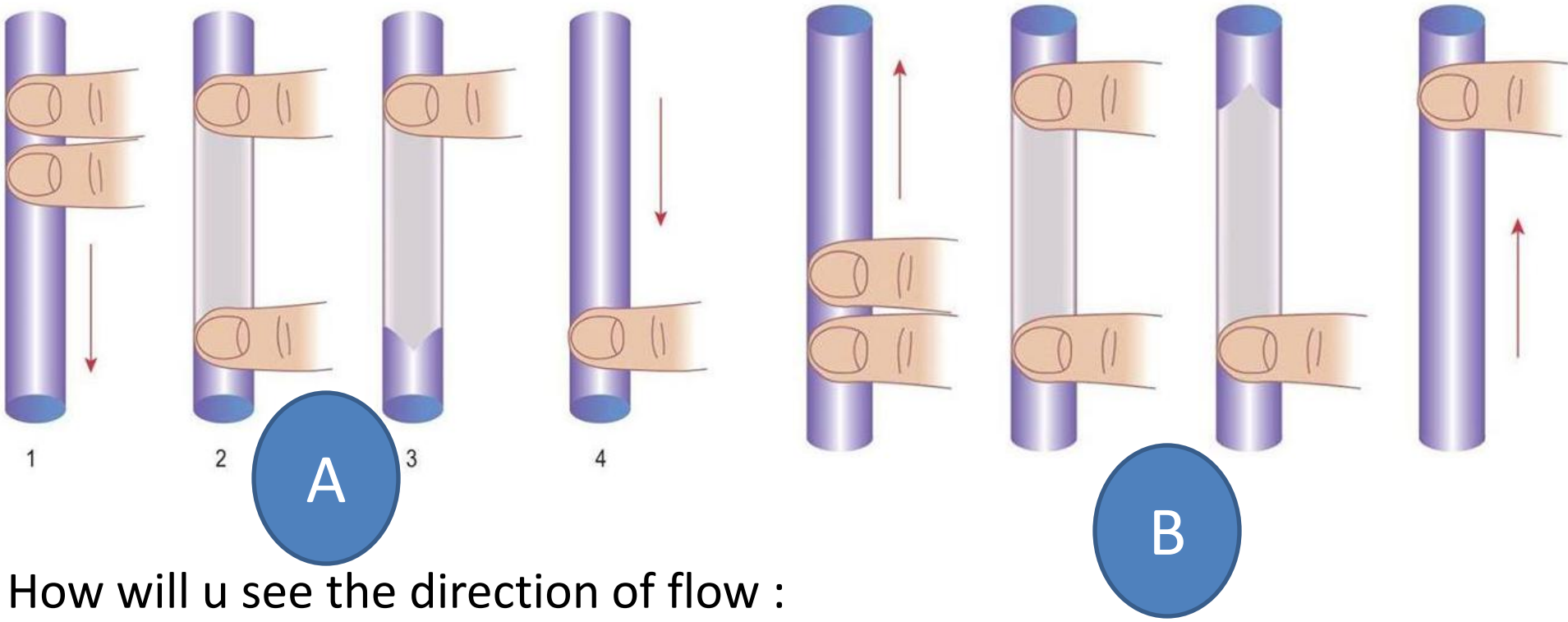


Engorged vein in abdomen is found due to

1. Portal hypertension
2. SVC obstruction (flow down ward)
3. IVC obstruction (flow up ward)
4. Cachexic person
   (due to loss of subcutaneous fat)
1. Normaly lean & thin person

IF YOU GOT ENGORGED VEIN THEN YOU HAVE SEE THE DIRECTION OF VENOUS FLOW





How will u see the direction of flow :

Place 2 fingers at one end of the vein and apply occlusive pressure

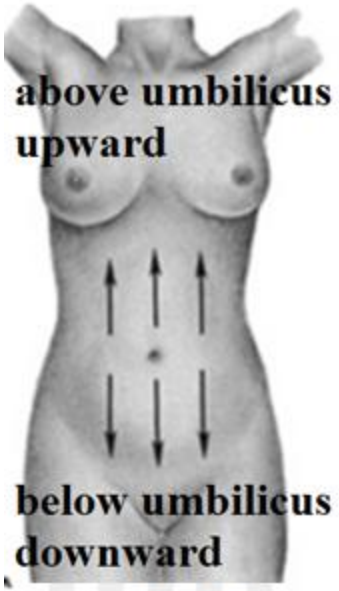
Move 1 finger along the vein, emptying that section of blood in a milking action.

Release the pressure from one finger and watch for flow of blood back into the vein.

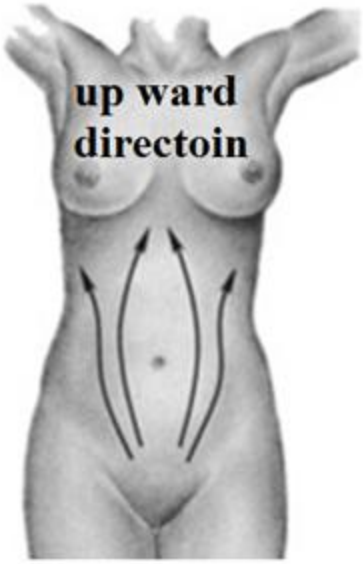
Repeat, emptying blood in the other direction.

Note in which direction the blood return quickly ---that direction is the direction of flow for that patient .

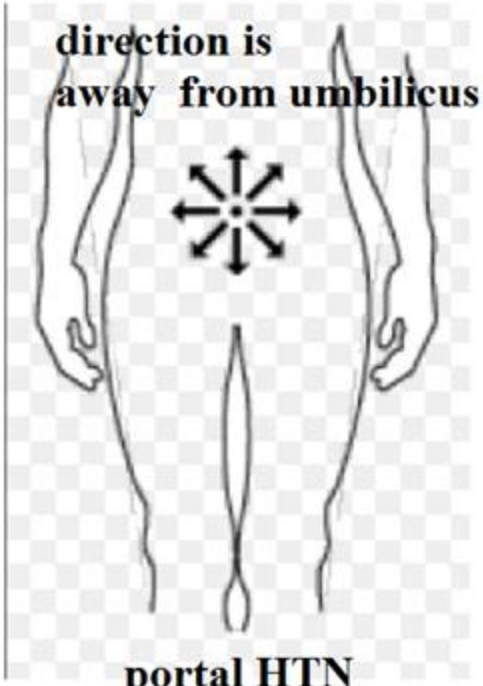
Caput medusa



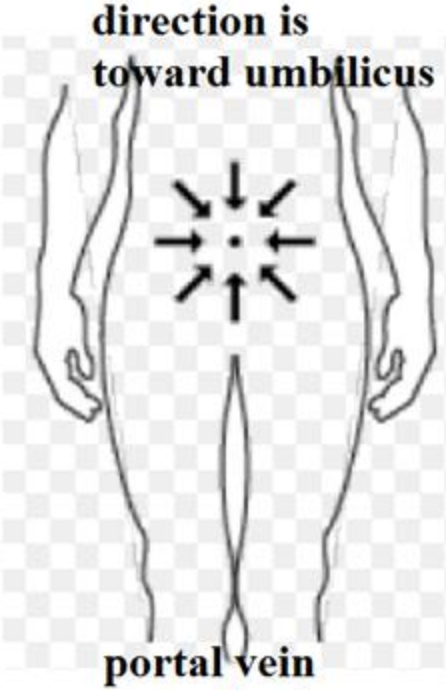
portal HTN



inf. vena cava obstruction



portal HTN



portal vein thrombosis

Sit	Direction of the flow
Above the umbilicus	If due to portal hypertension – Direction will be upward
Below the umbilicus	If due to portal hypertension – Direction will be downward
Around the umbilicus (caput medusa)	If due to portal hypertension – Away the from the umbilicus
To remember it In case of portal hypertension ---common formula is away from umbilicus	

PIGMENTATION

Pigmentation

Look for

Hypo pigmentation (any fungal infection)

Hyper pigmentation

Cullen's sign:

Discolouration at the umbilicus and surrounding skin

Grey-Turner's sign:

Discolouration at the flanks

Cause

Acute haemorrhagic pancreatitis

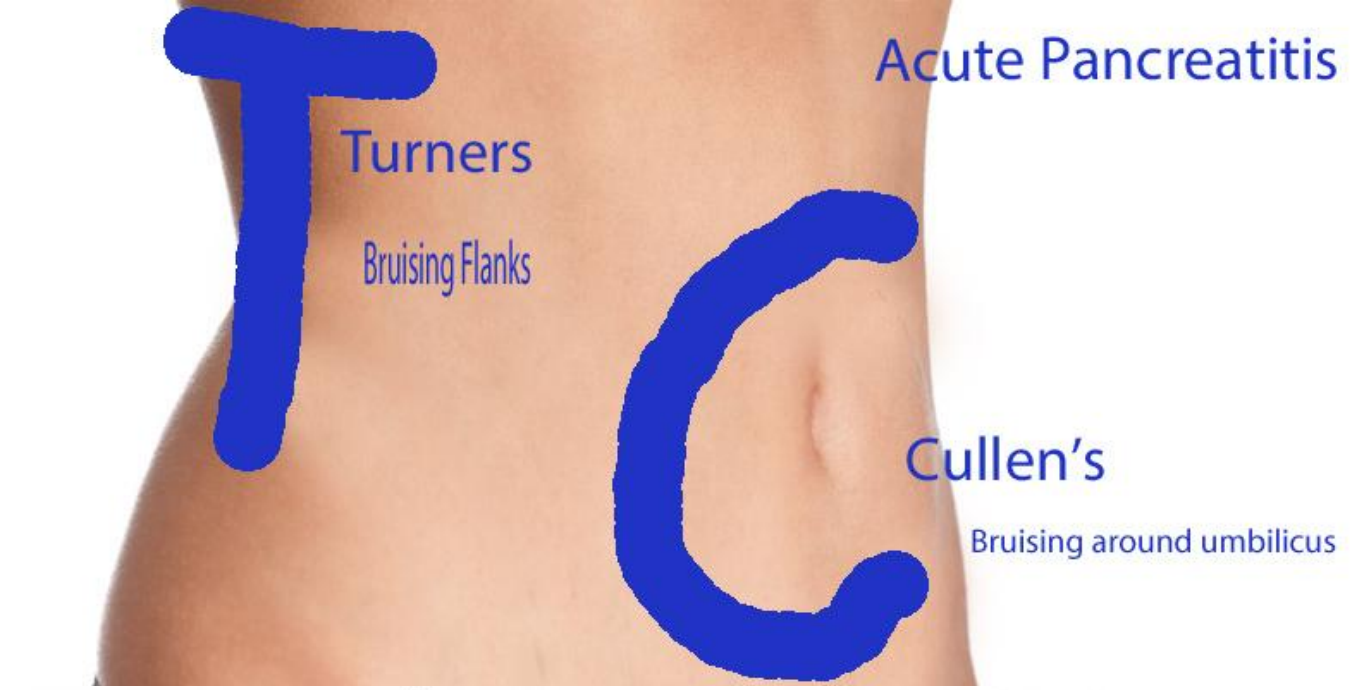
Rupture ectropic pregnancy

Rupture spleen

Any cause of bleeding (blood dyscrasia)


A


Cullen's Sign

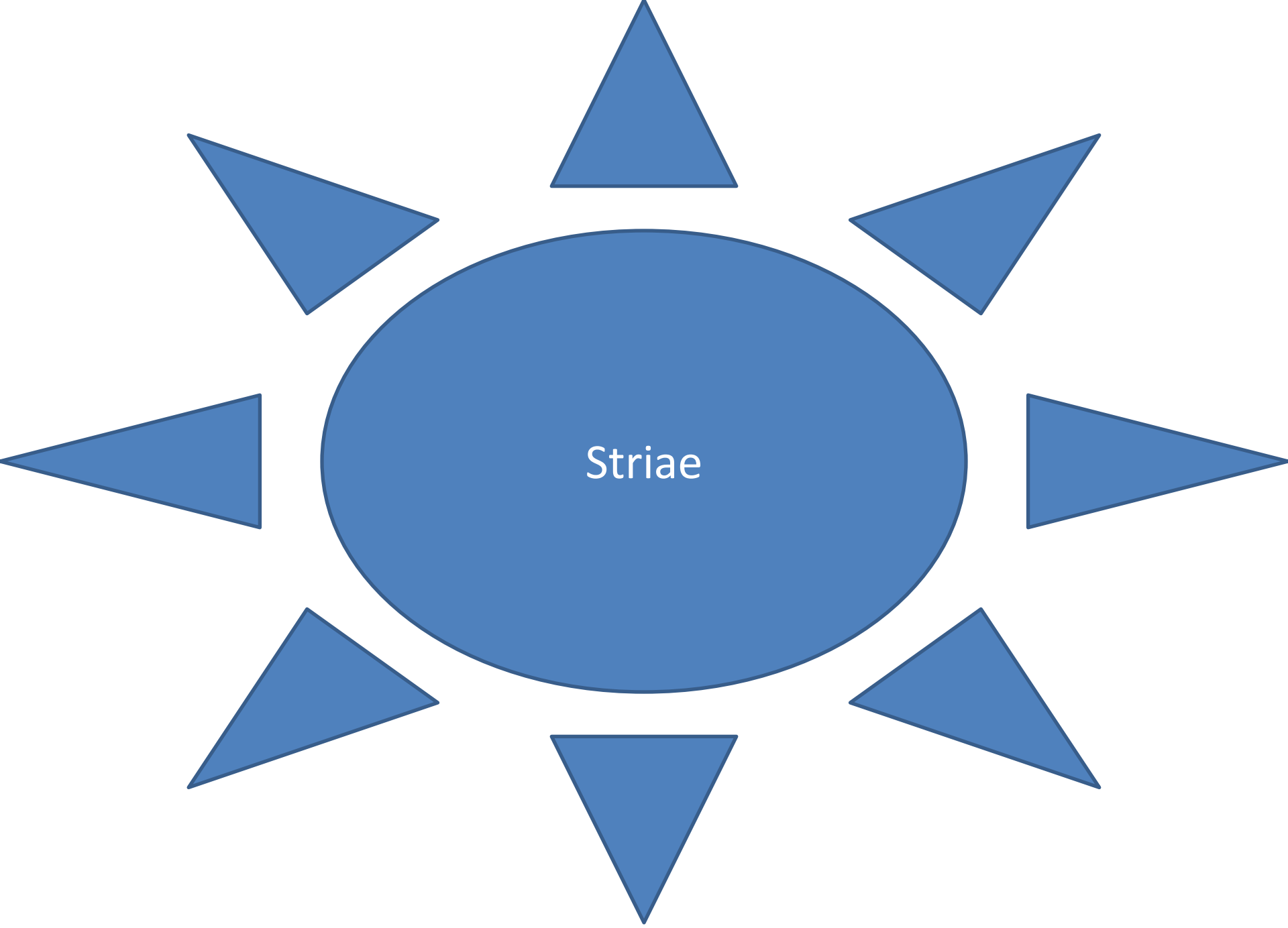


GREY TURNER[1] SIGN

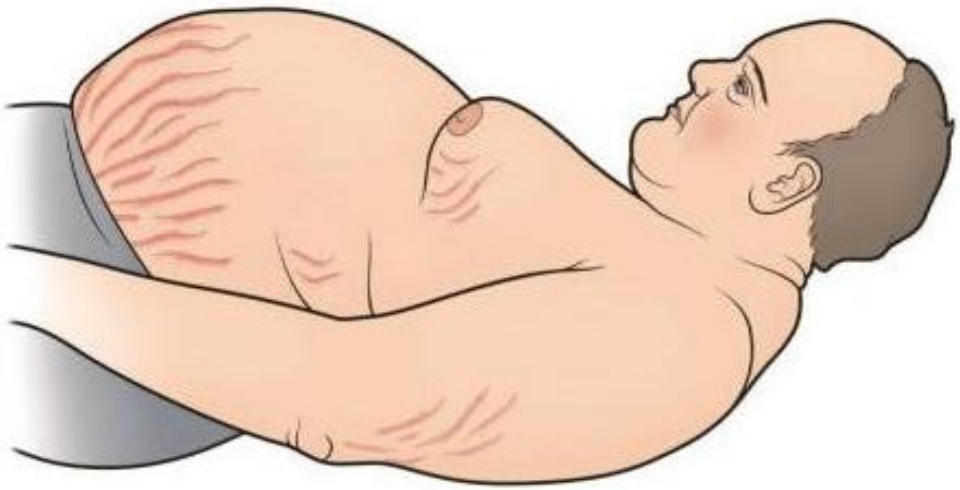
CULLEN[2] SIGN

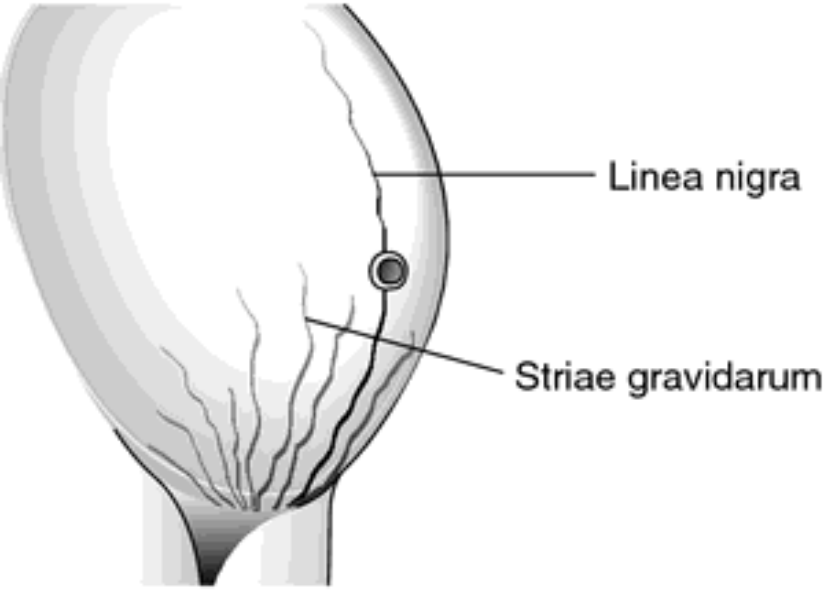
Cause

Acute haemorrhagic pancreatitis
Rupture ectropic pregnancy
Rupture spleen
Any cause of bleeding (blood dyscrasia)


Striae

Look for striae

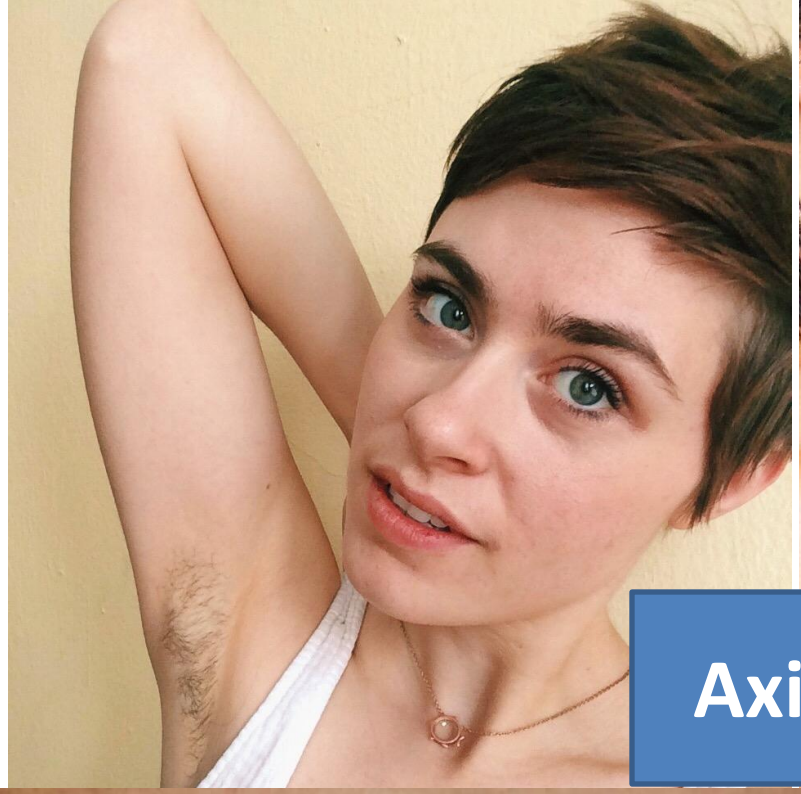


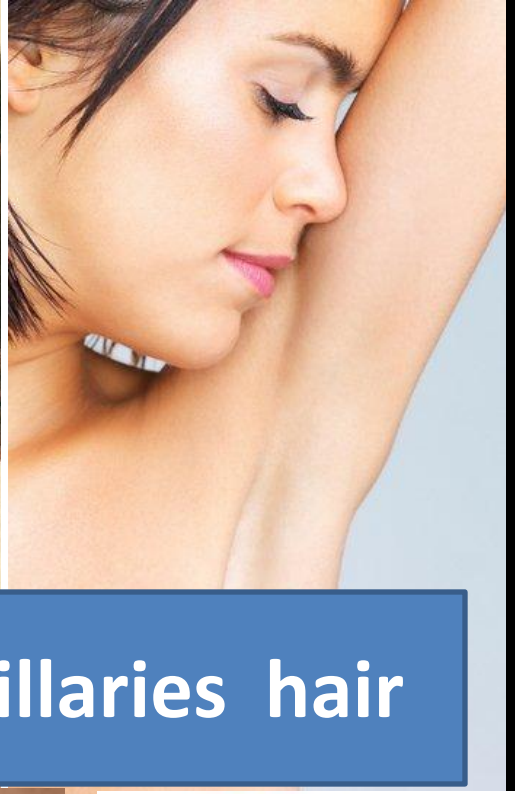


These are linear white or pink marks over skin
Due to: stretching of skin cause by rupture elastic fiber

Cause of striae	Identifying point
Striae gravidarum	In female , below the umbilicus and white , pink line
Striae of obesity	Usually narrow ,whitish , vertical, mostly around the axilla , groin
Cushing	Usually wide , horizontal / oblique pink or purple color

Body hair distribution
Or
Hair loss



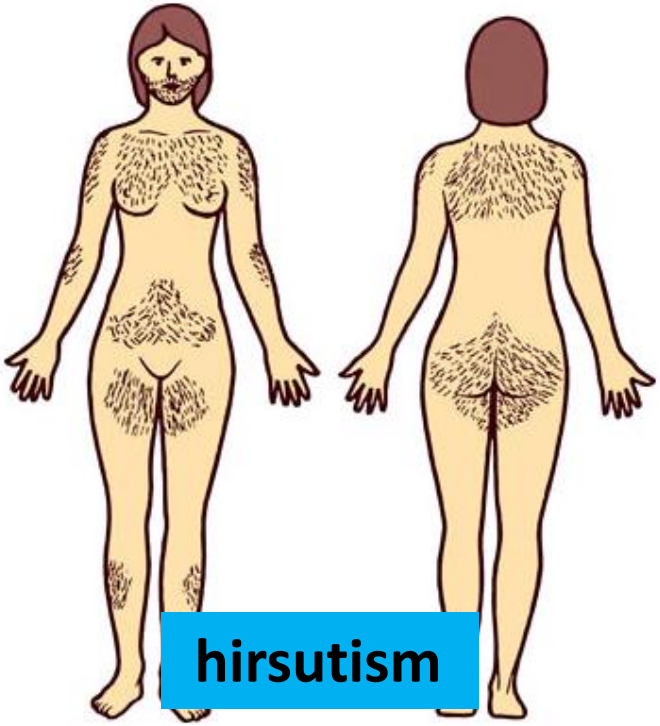


Axillaries hair

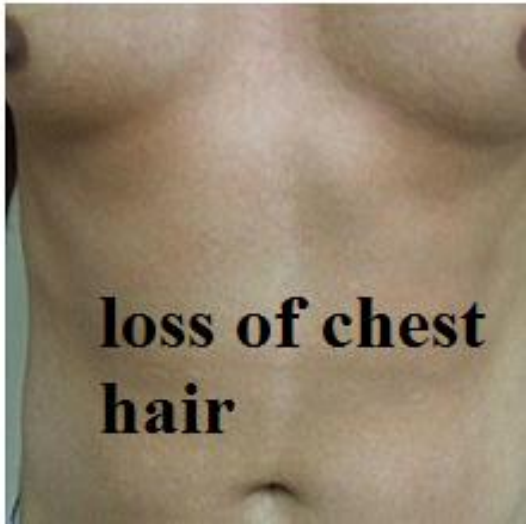
female

male

normal hair distributin



hirsutism



loss of chest hair

Body hair distribution

It may be normal

Or

Loss of pubic or axillary hair

CLD or

Hypogonadism.

Hypopituitarism

increased body hair

In hirsutism or virillism

(polycystic kidney, Adrenal hyperplasia)


SCAR –MARKS

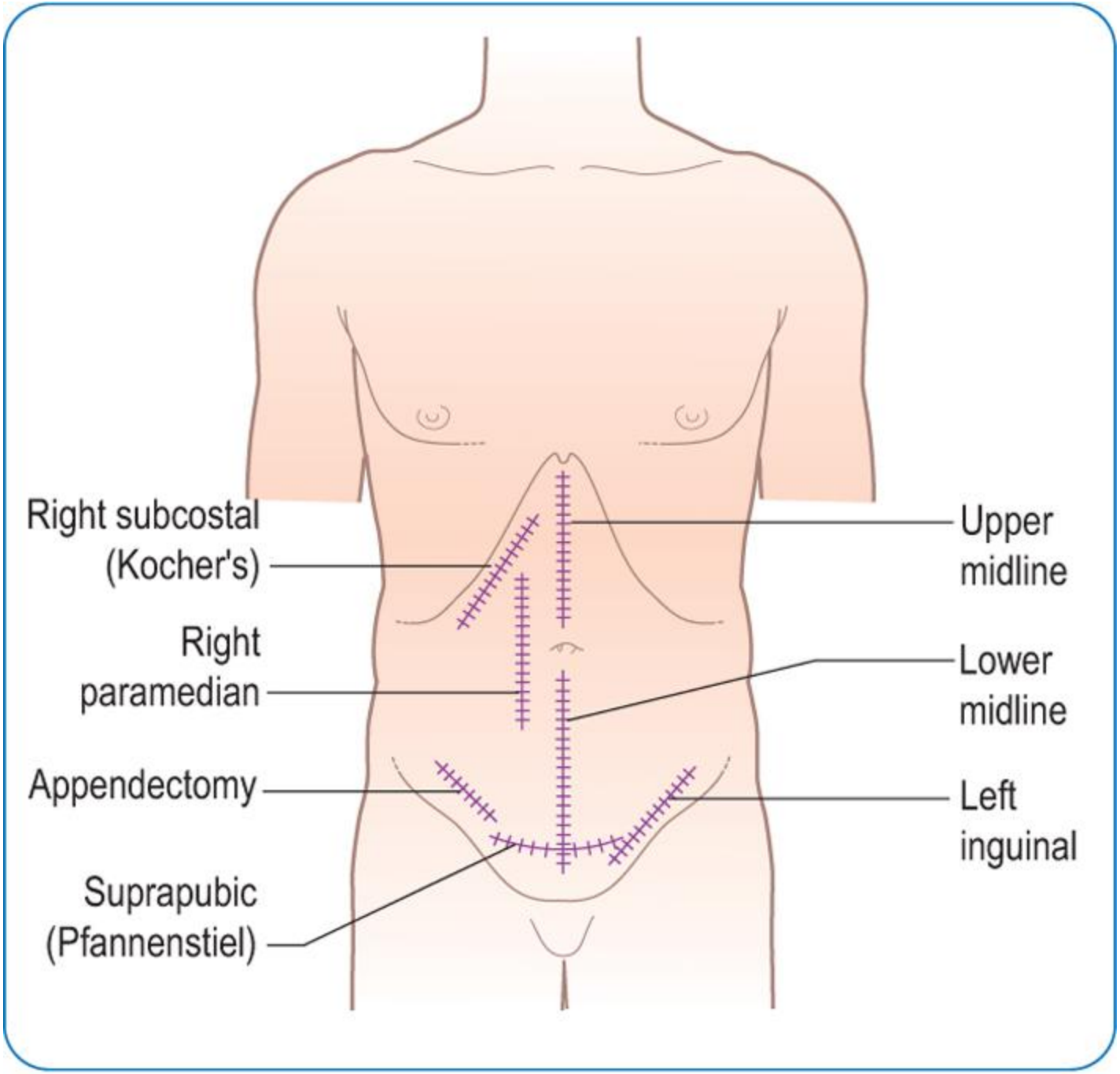
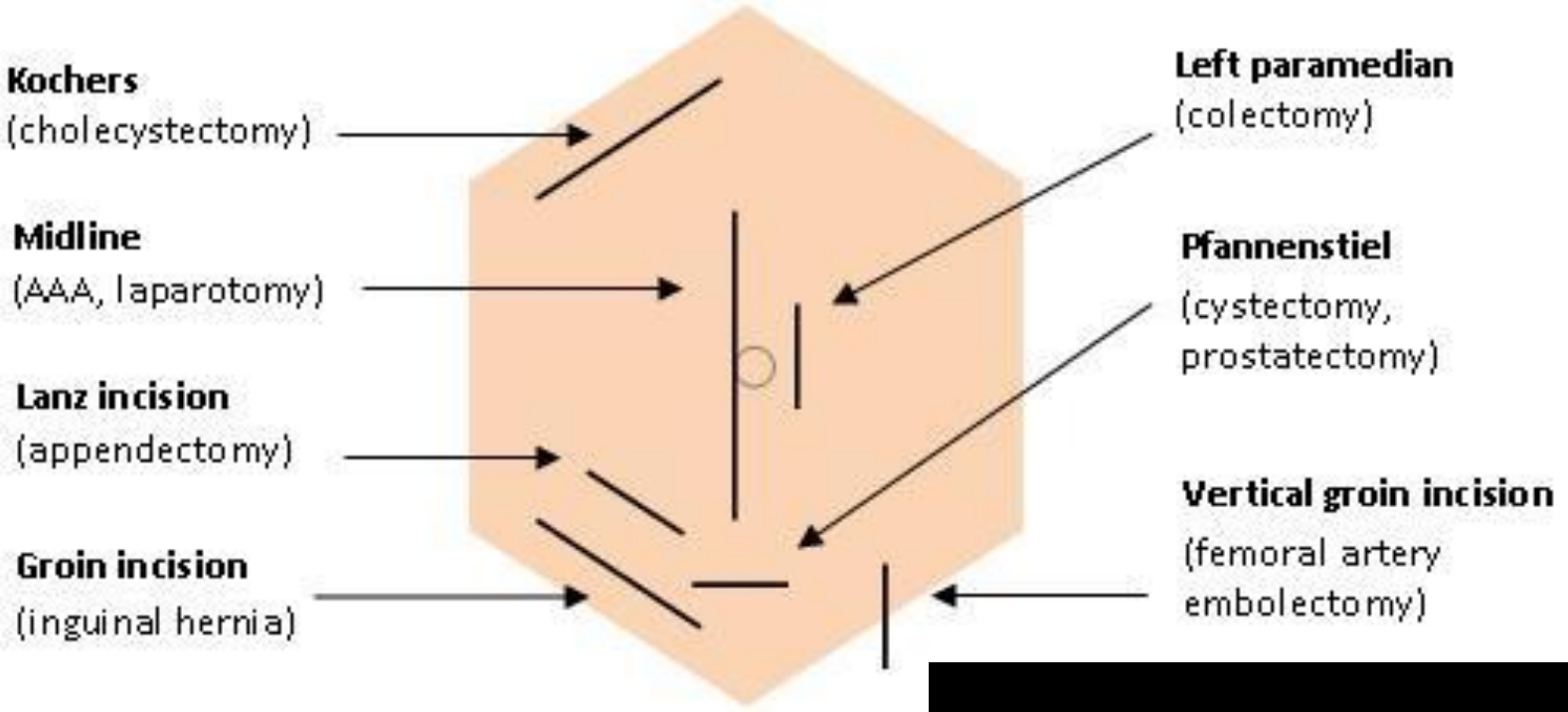
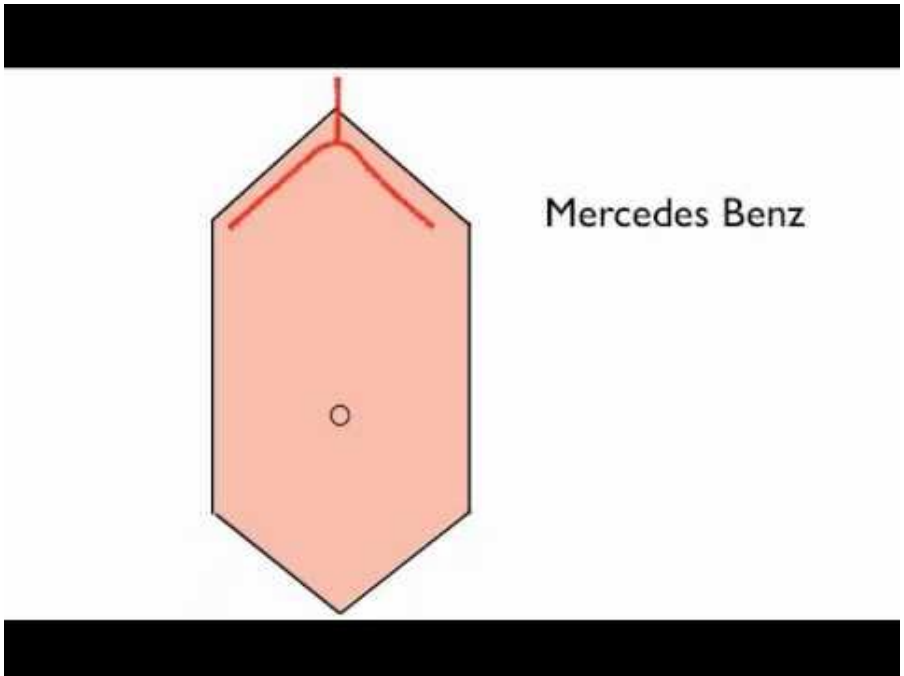
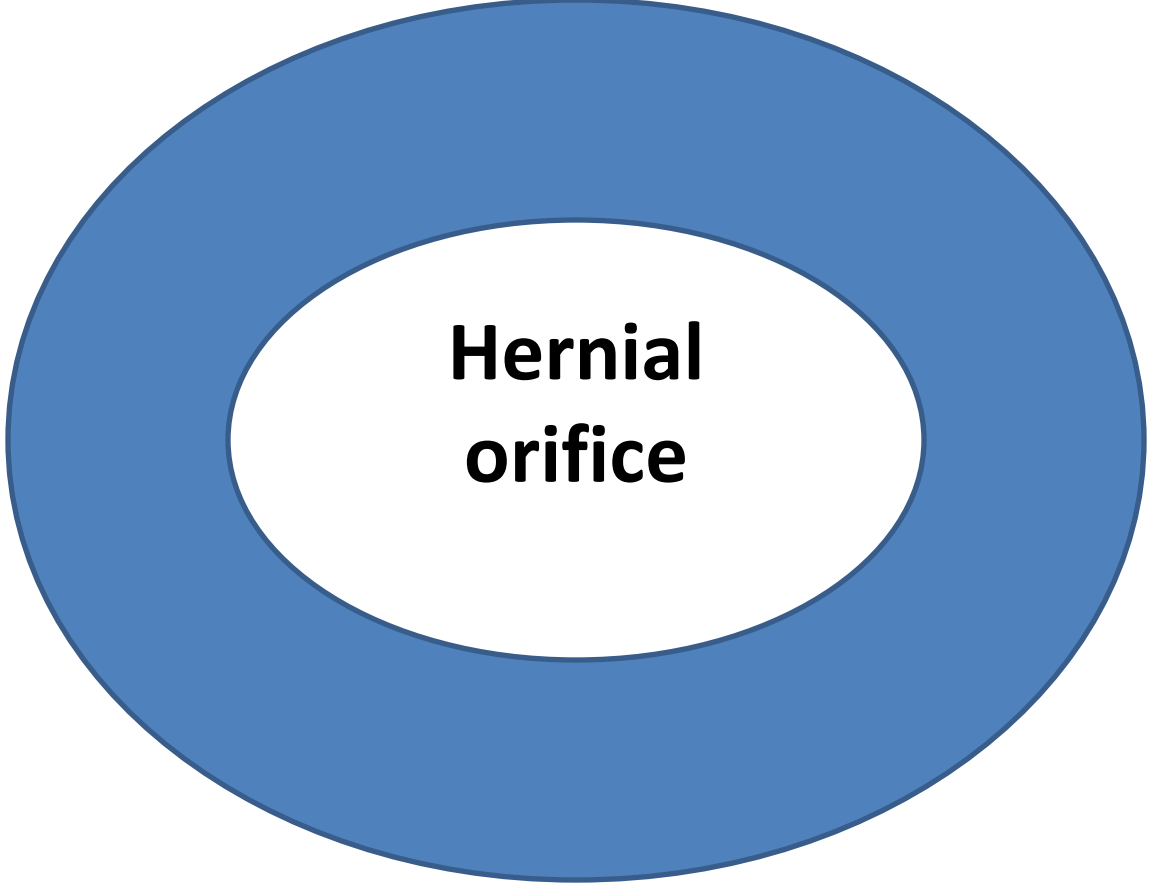


Figure 1: Surgical Scars

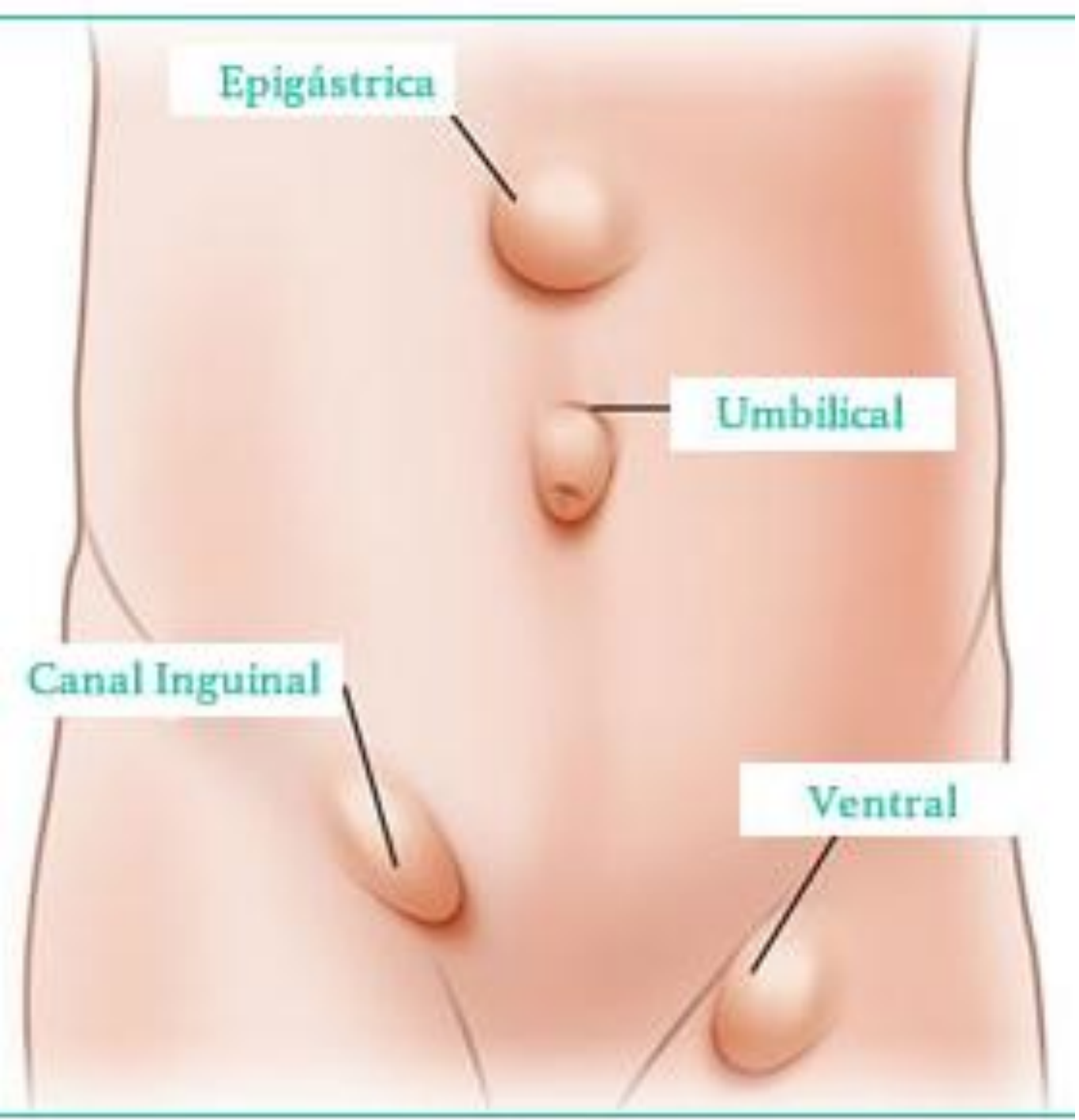


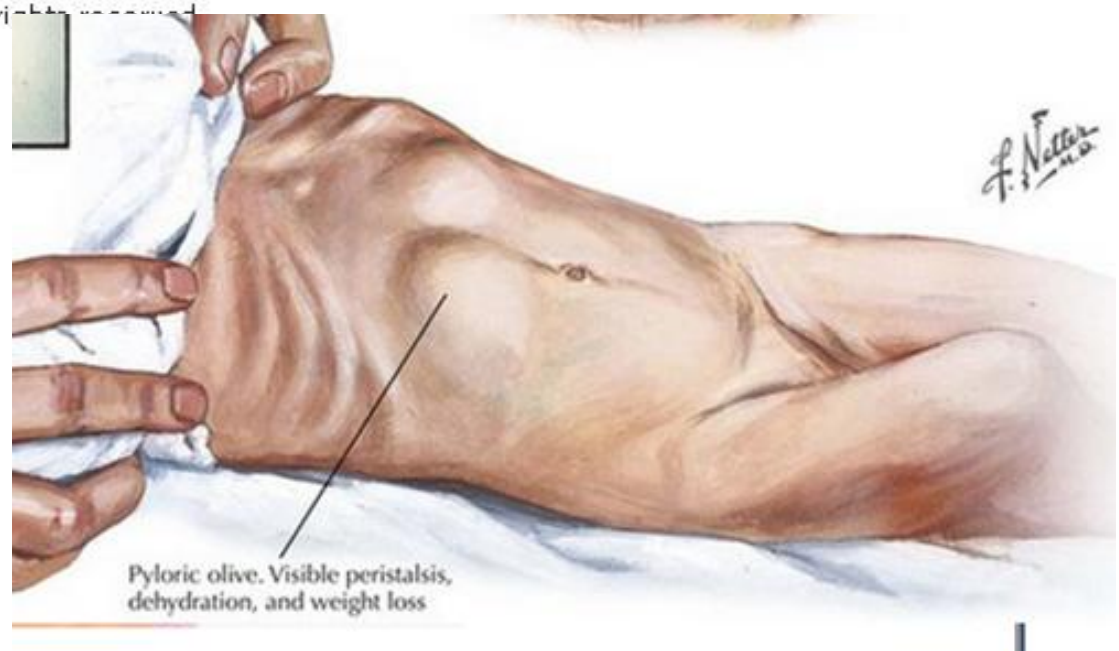




Hernial orifice

Ask the patient to cough and meanwhile u look inguinal canal for hernial horifice intact or not


Epigástrica
Umbilical
Canal Inguinal
Ventral



Visible peristalsis in obstructed femoral hernia.

You also have to look for the following

Movement of Respiration

Thoraco—abdominal

Normally in female

Phrenic nerve palsy

Abdominal thoracic

Normally in male (as male diaphragm > then female diaphragm)

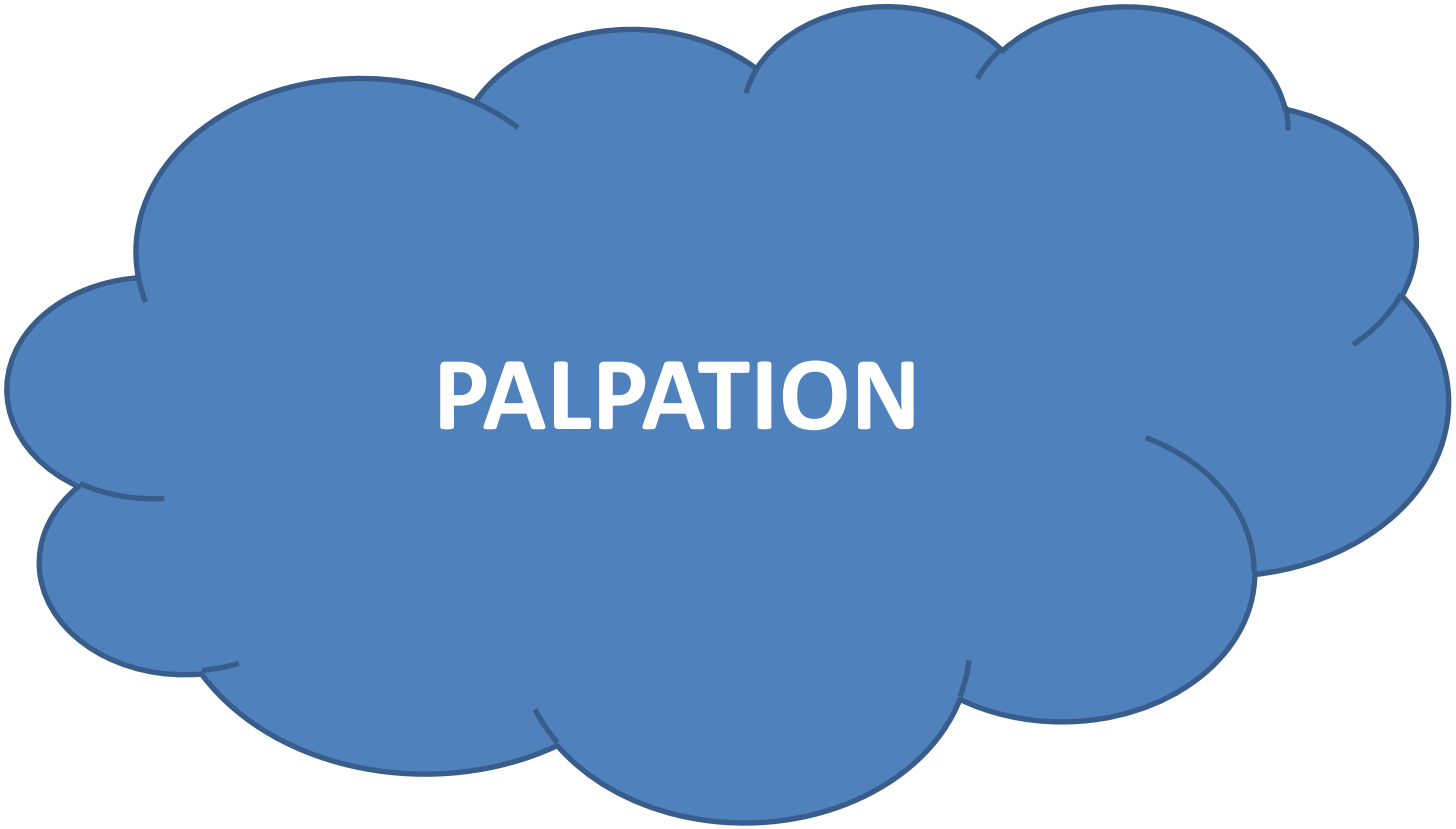
OTHERS YOU MAY SEE

Gynaecomastia

Spider navi

Also look for any bandage mark and

Spider nave


PALPATION

Palpation:

Superficial palpation

Deep palpation

Organ palpation

- Liver
- Spleen
- Kidney
- Urinary bladder

Para aortic lymph node

Fluid thrill

Testes –size and consistency

Start superficial and deep palpation as anti-clockwise .Start from LIF (1) go anticlockwise like sequence shown In figure and end in umbilical region (9th)

Right hypochondriac region

5th

Epigastric region

4th

3rd

Left hypochondriac region

Right lumbar region

6th

Umbilical region

9th

2nd

Left lumbar region

7th

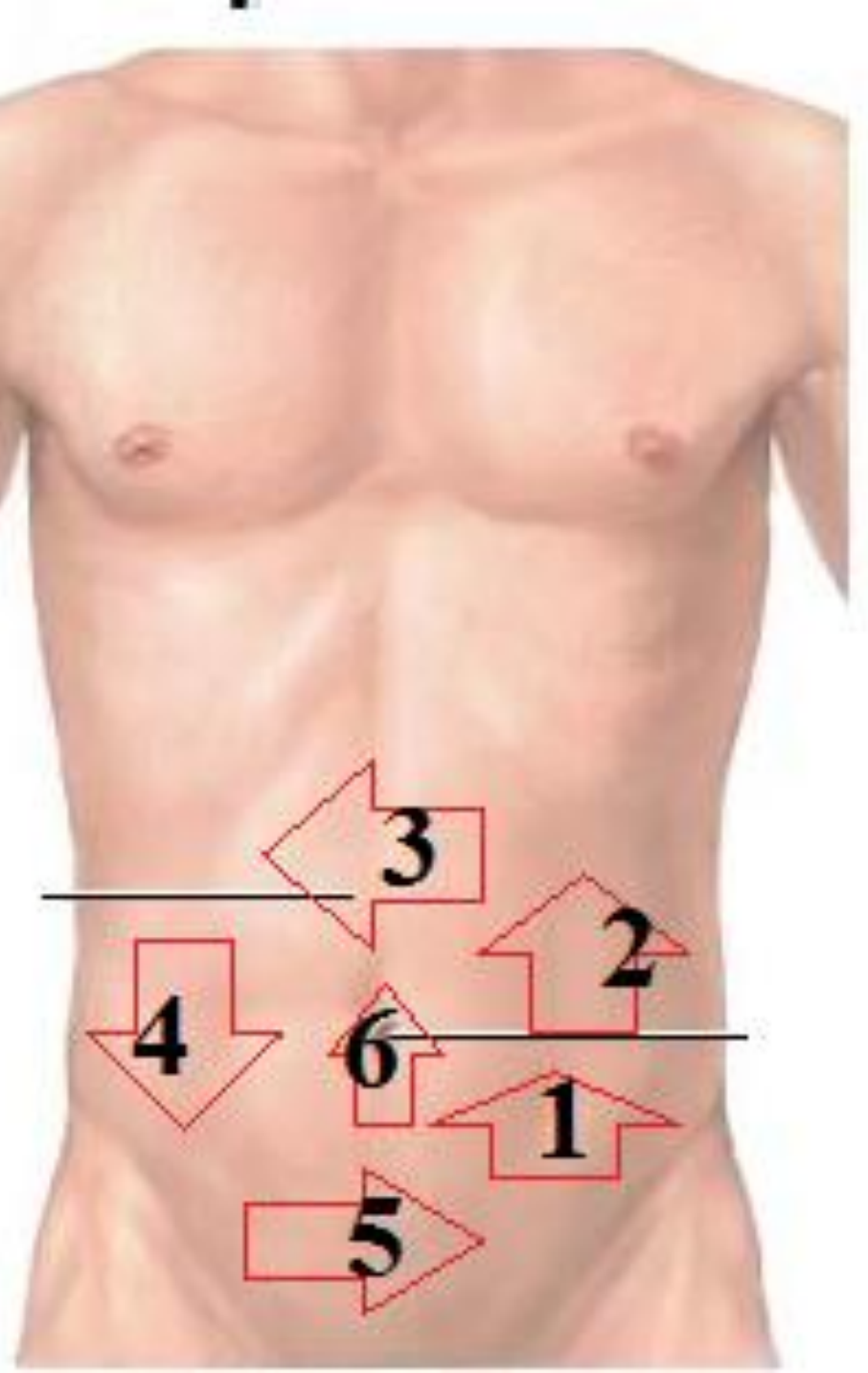
8th

Hypogastric region

1st

Right iliac region

Left iliac region



First ask the patient if there any pain present or not

if no pain then start from the region 1 or left iliac fossa end in umbilical or region 6

if patient tell he feels pain in region 1 or left iliac fossa Then start palpation from region 2 and region 1 will palpate at the end

Place palmer surface of hand over abdomen like the picture

Special attention there will no flexion of MP joint The hand will remain straight

1. Use your right hand,
2. keeping it flat and in contact with the abdominal wall, and finger will be straight
3. avoid using your finger tips and no movement of MP joint
4. During palpation u always look at patient's face for any pain and discomfort

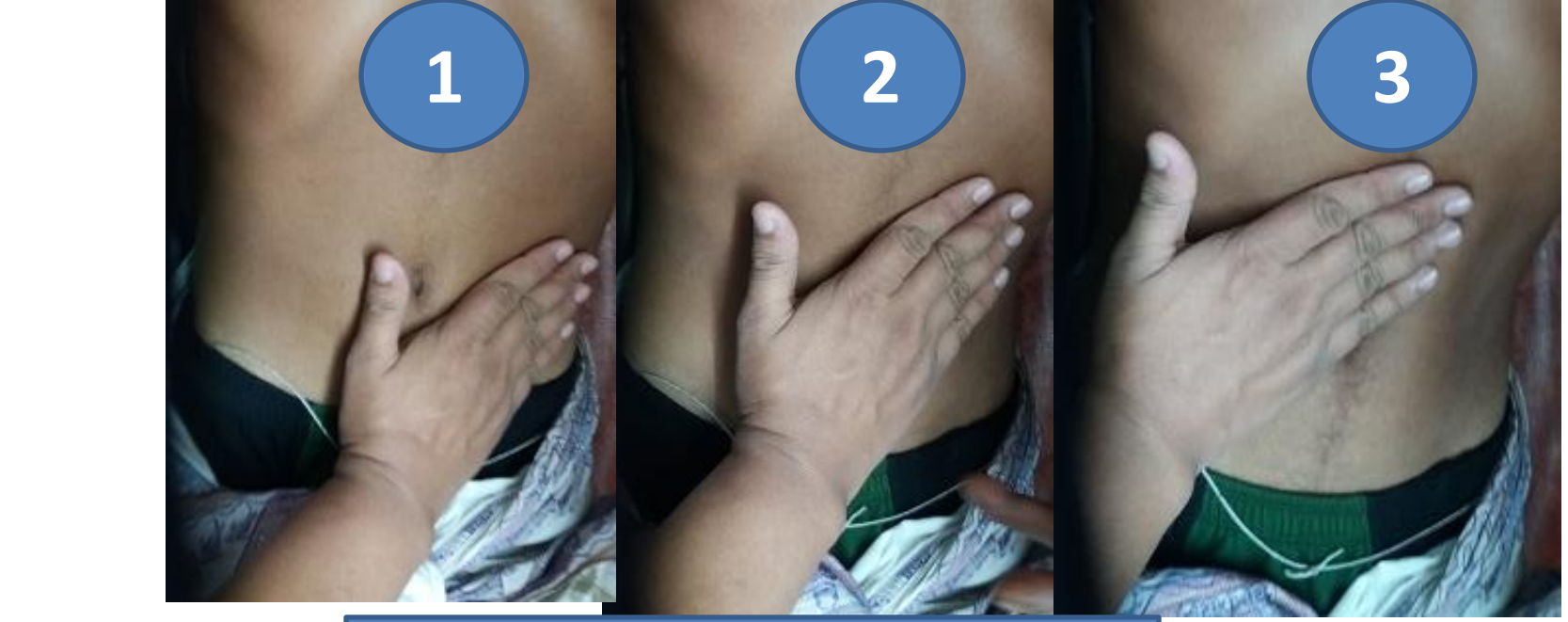
Now palpate the abdomen in following way

Step-1 Ask pt if there any pain or not

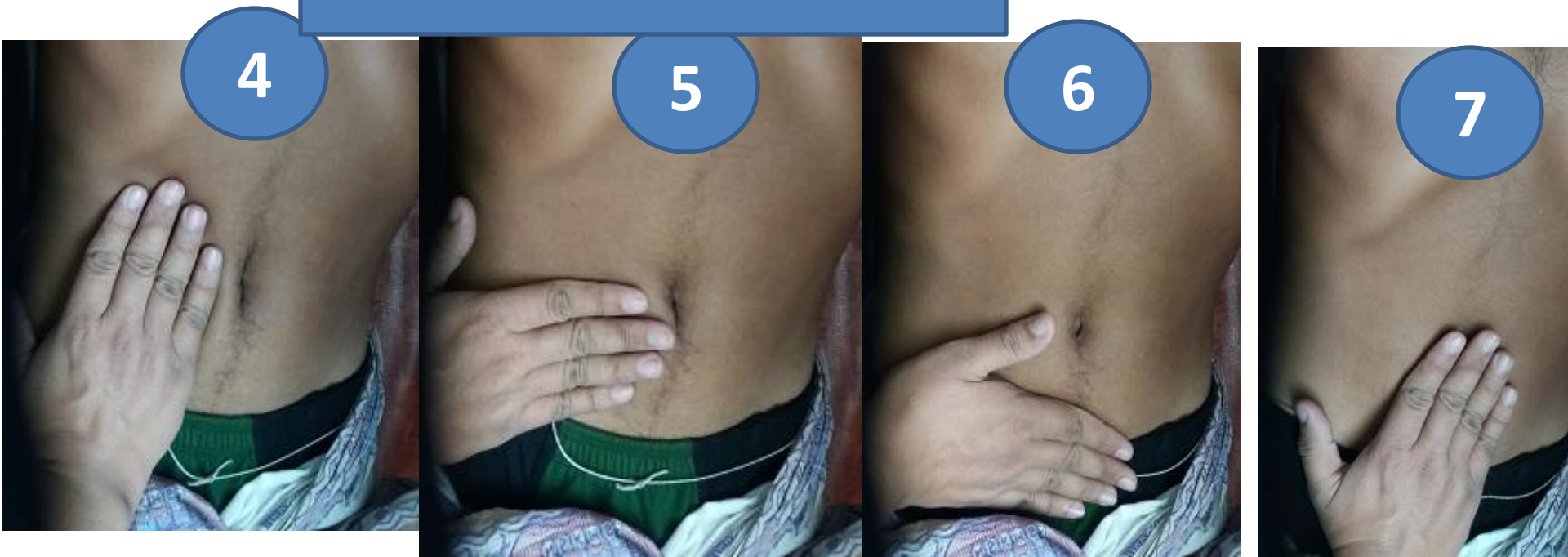
Step –2 first see temps. Put u r dorsum of the hand first on forehead and then put it on central abdomen to compare the temperature of abdomen with.

Step -3 with palmer surface of hand and finger just begin to palpate the abdomen which will be started as anti clock wise in following frequency such as:

LIF---- Left lumber ----left hypochrondium --- Epigastrium ---Right hypochrondium—right lumber—RIF –hypogastrium ---end in umbilicus



SUPERFICIAL PALAPTION



What will u see in superficial palpation?

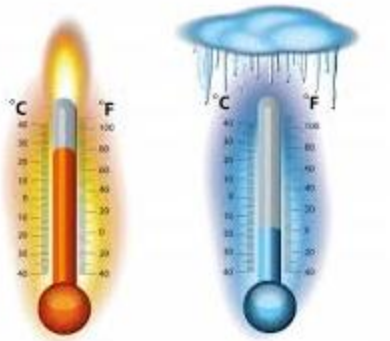
Temperature

Tenderness

Rigidity (if present then mention the site –eg. epigastrium)

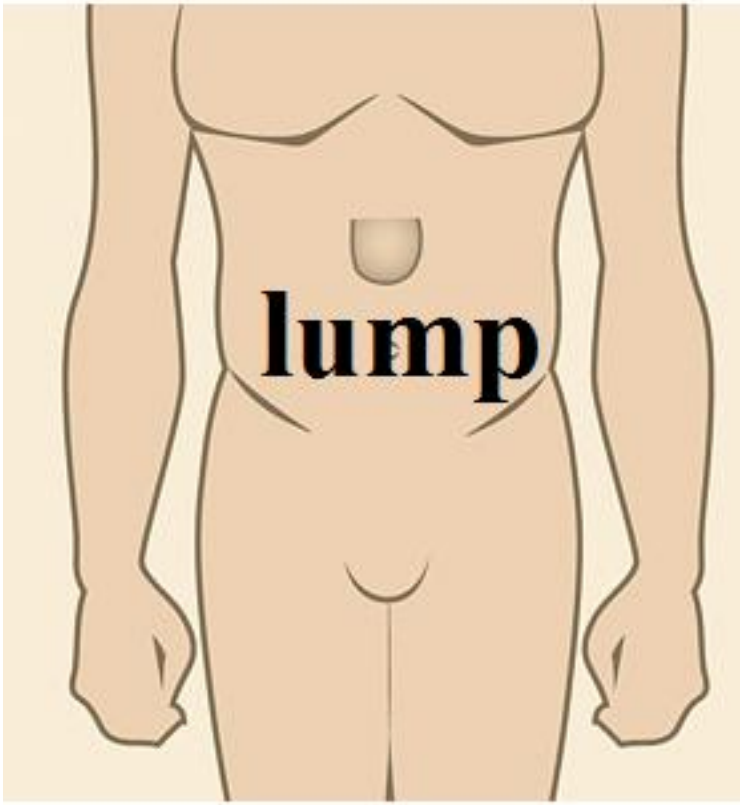
Hyperesthesia

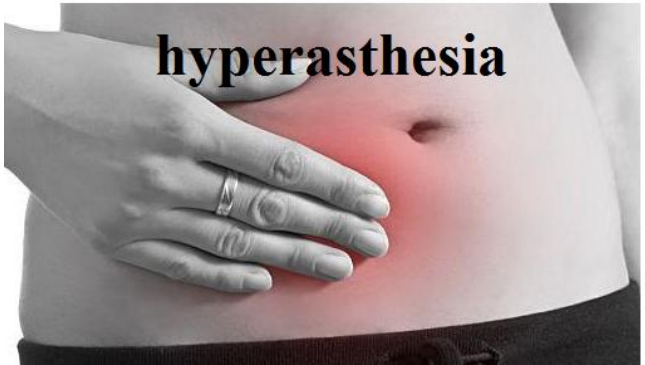
Any lump

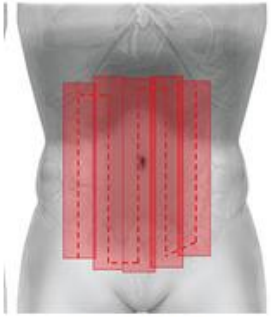


Temperature

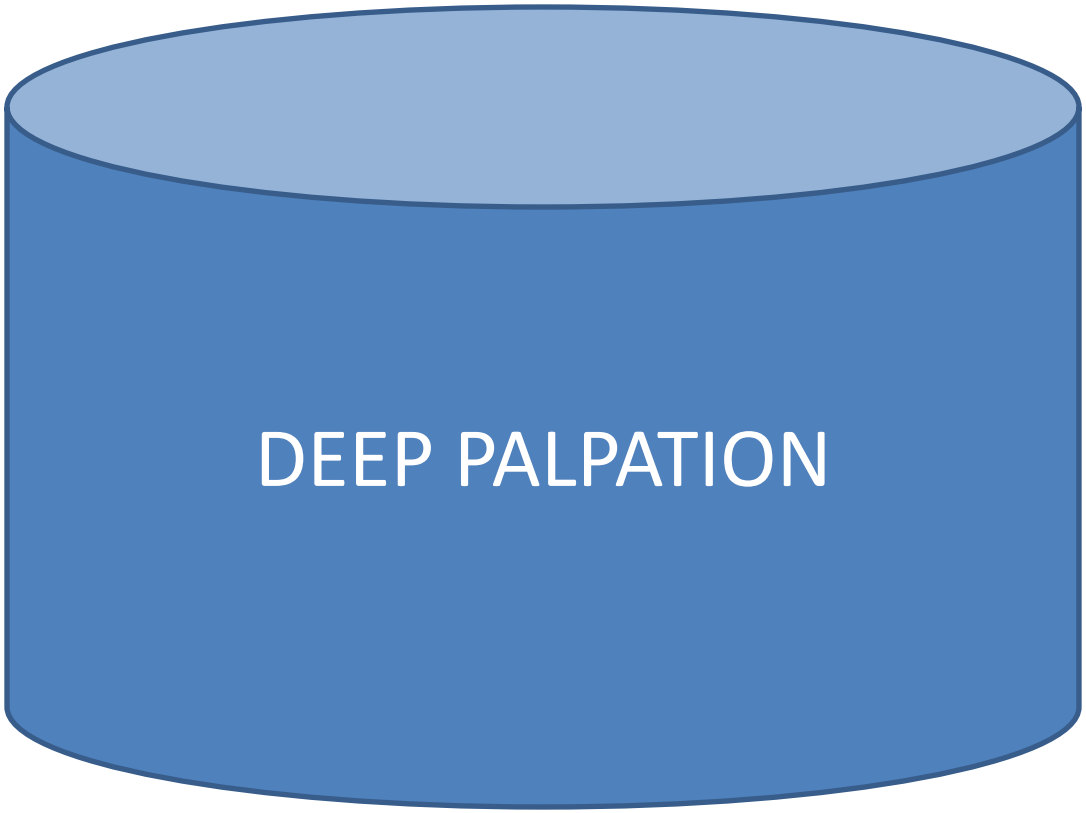
tenderness of abdomen







rigidity


DEEP PALPATION

Deep palpation:

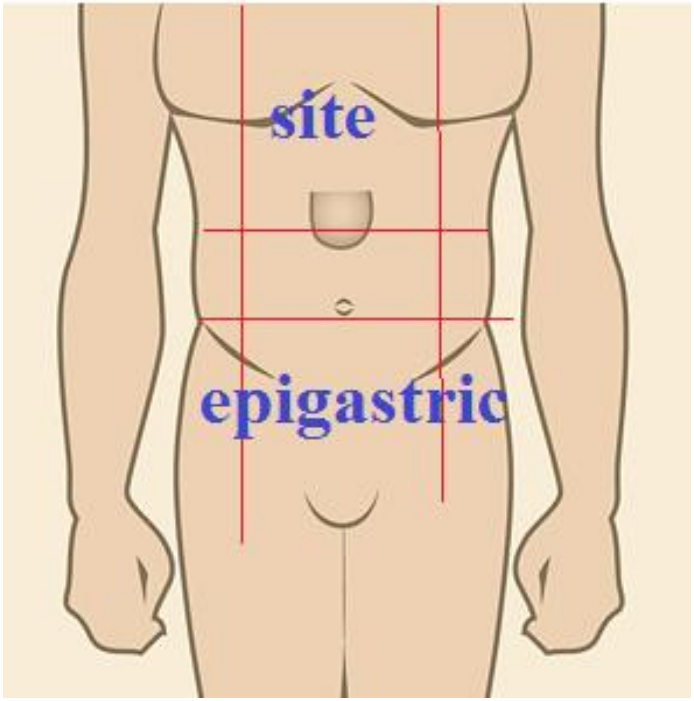
Do it with palmer surface of hand and finger in following the sequence of superficial palpation but here there will be Flexion MP joint and finger will downward pressing the abdominal wall inward .

In deep palpation u also see rebound tenderness if u found tenderness in superficial palpation

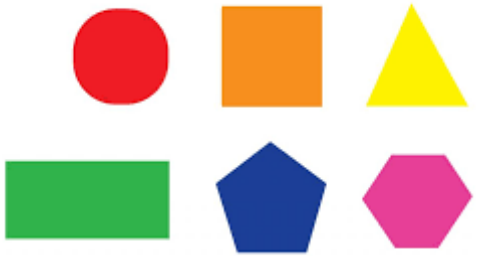
If u found any lump in superficial palpation u have to describe it in deep palpation

WHAT WILL U SEE IN DEEP PALPATION

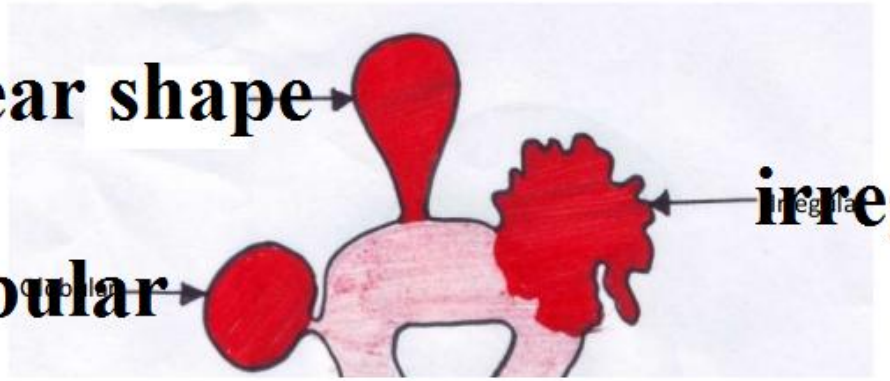
S	**Site (in which quadrant)**
S	**Size (2X 3 cm)**
S	**Shape**
S	**Surface (smooth / irregular)**
C	**Consistency (soft/ firm / hard)**
T	**Tenderness (tender / non tender)**
M	**(mobile / fixed)**
R	**Relation with under lying structure & overlying skin**
I	**Intra or extra-abdominal**

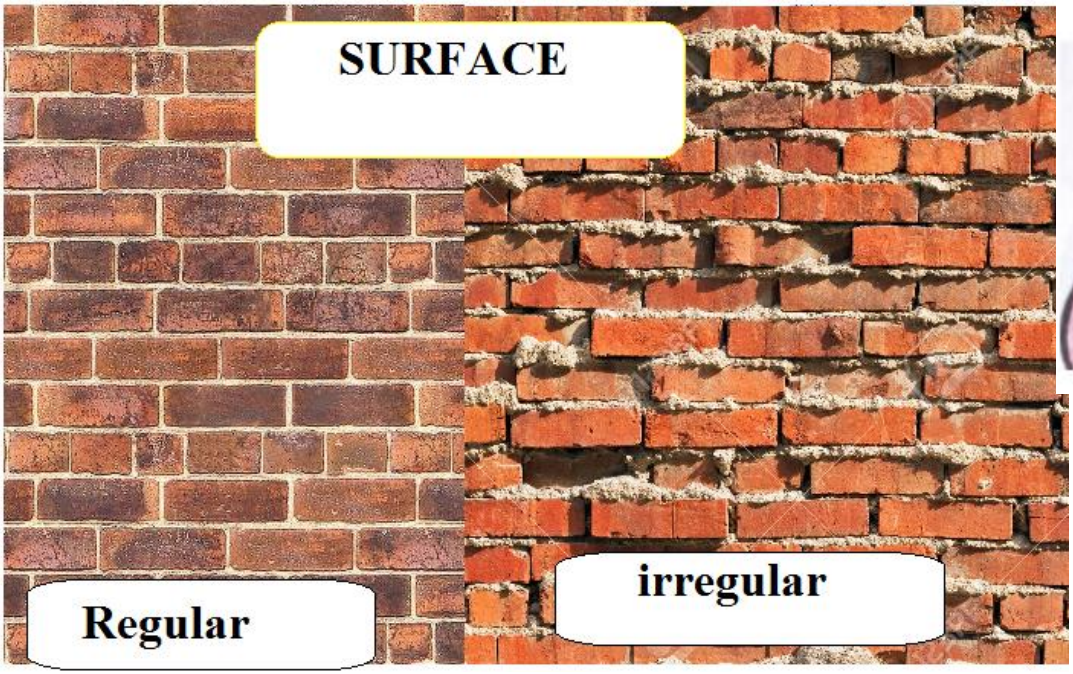

site
epigastric

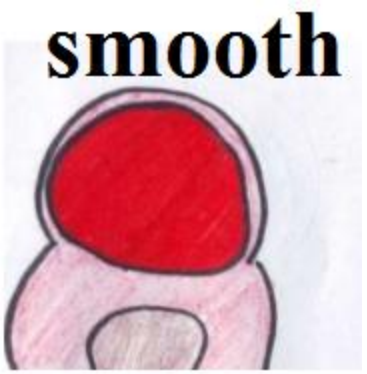

SIZE
matters
3 X4 cm

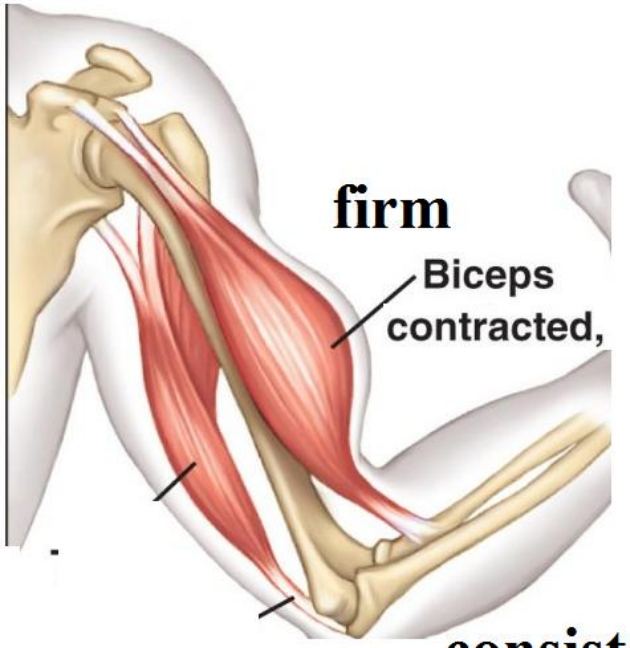


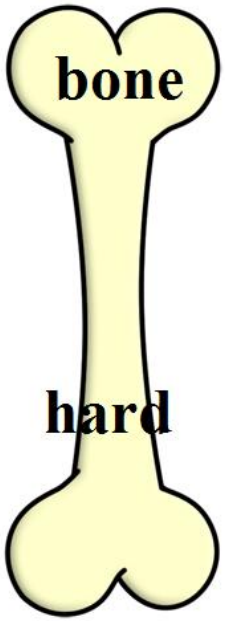
SHAPE


pear shape
irregular
globular

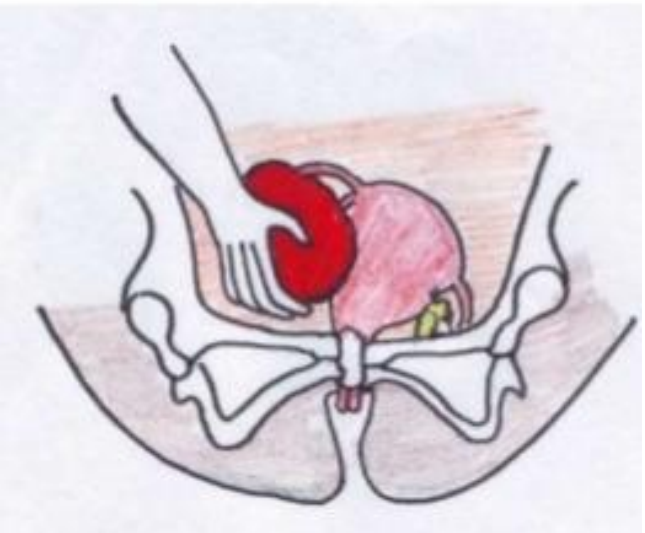






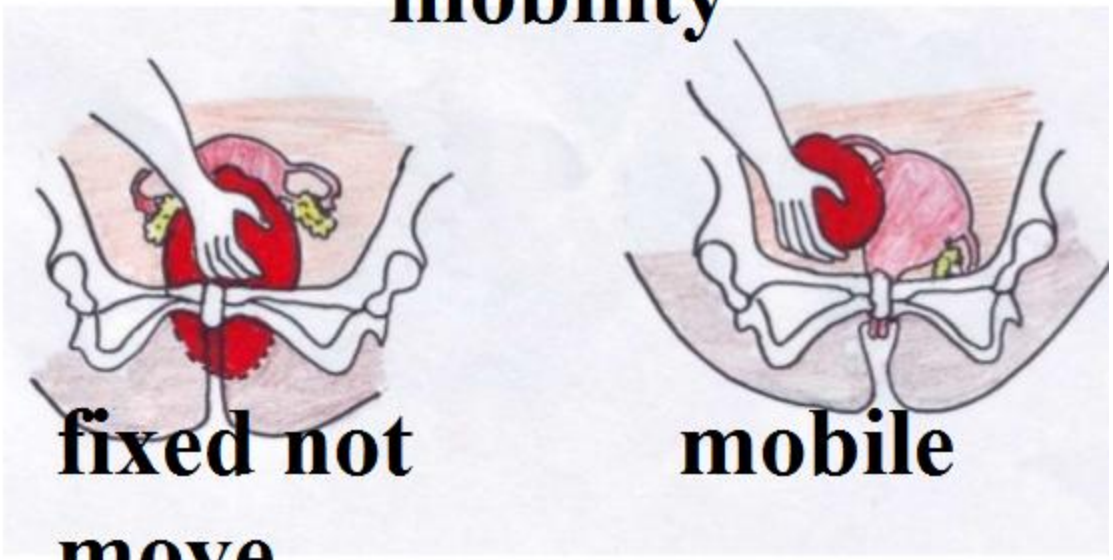


consistency



See mobiliity
Is lump is **(mobile / fixed**

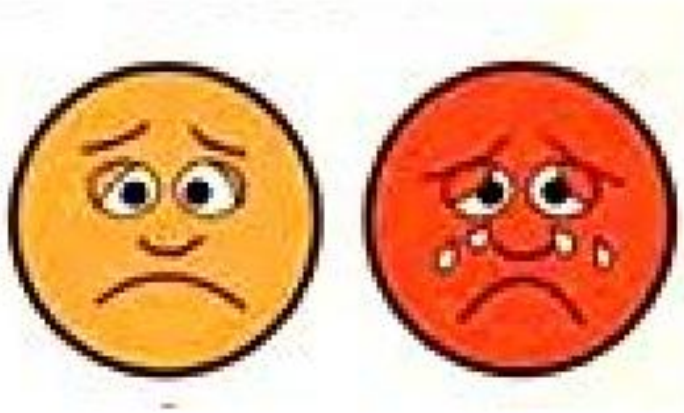
mobility



fixed not move

mobile

tender



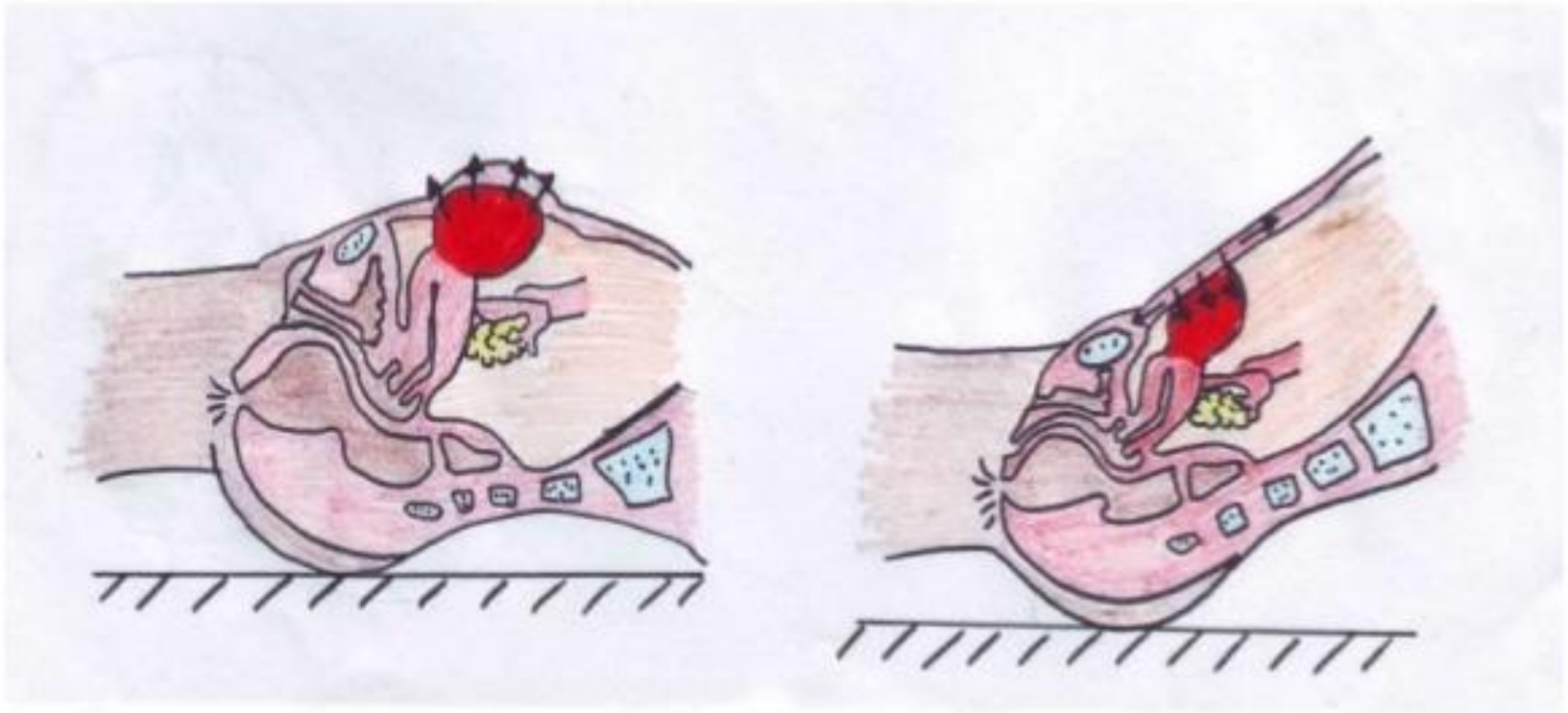
How will u see the lump is intra-abdominal or extra-abdominal?

- Ask the patient to raised his head or leg keeping the knee straight
- If the lump becomes prominent ---then it is extra abdominal
- If the lump disappear ---then it is intra abdominal

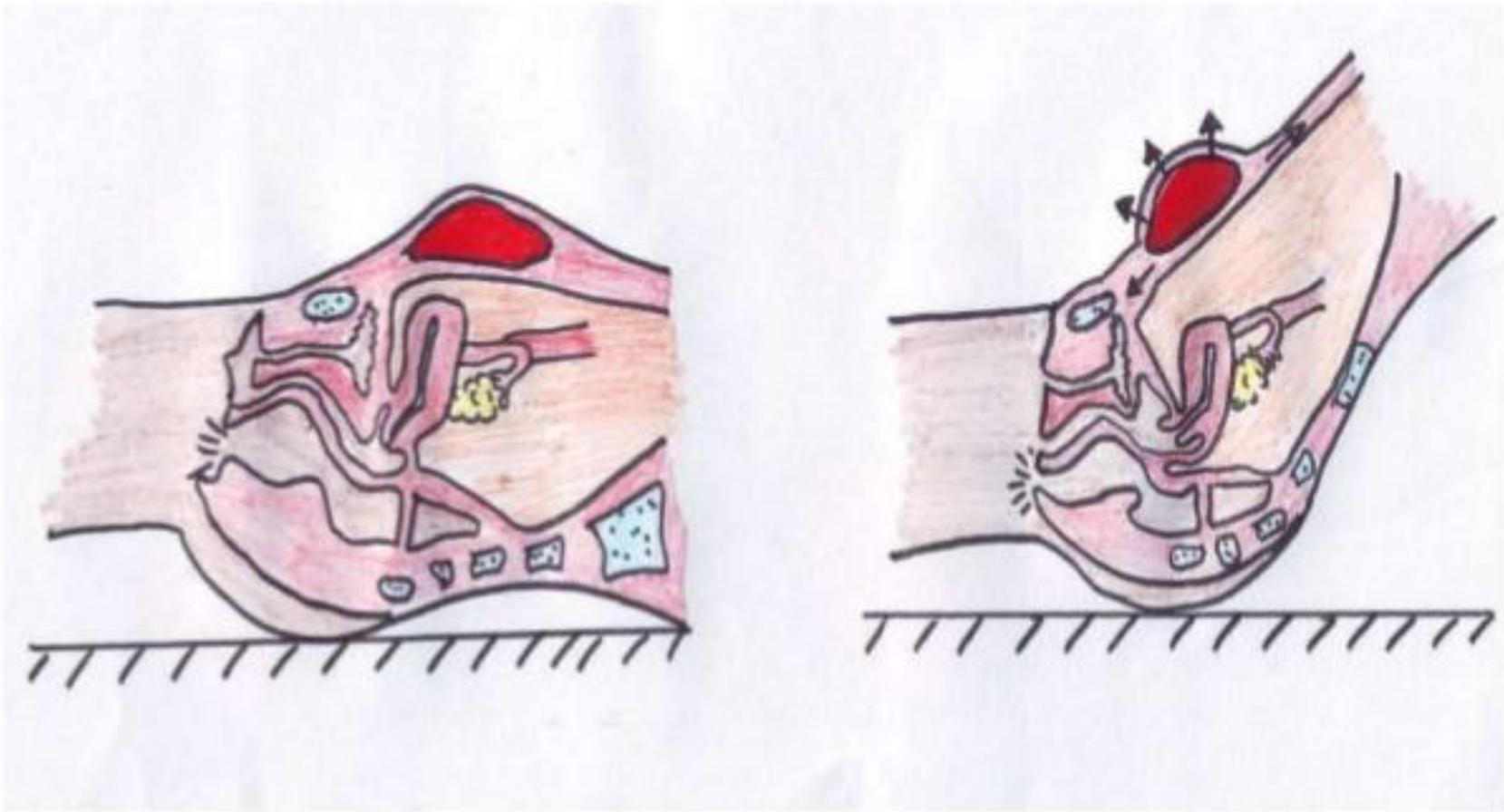
•Ask the patient to raised leg keeping the knee straight

- Ask the patient to raised his head

Intra abdominal - Disappears with head elevation

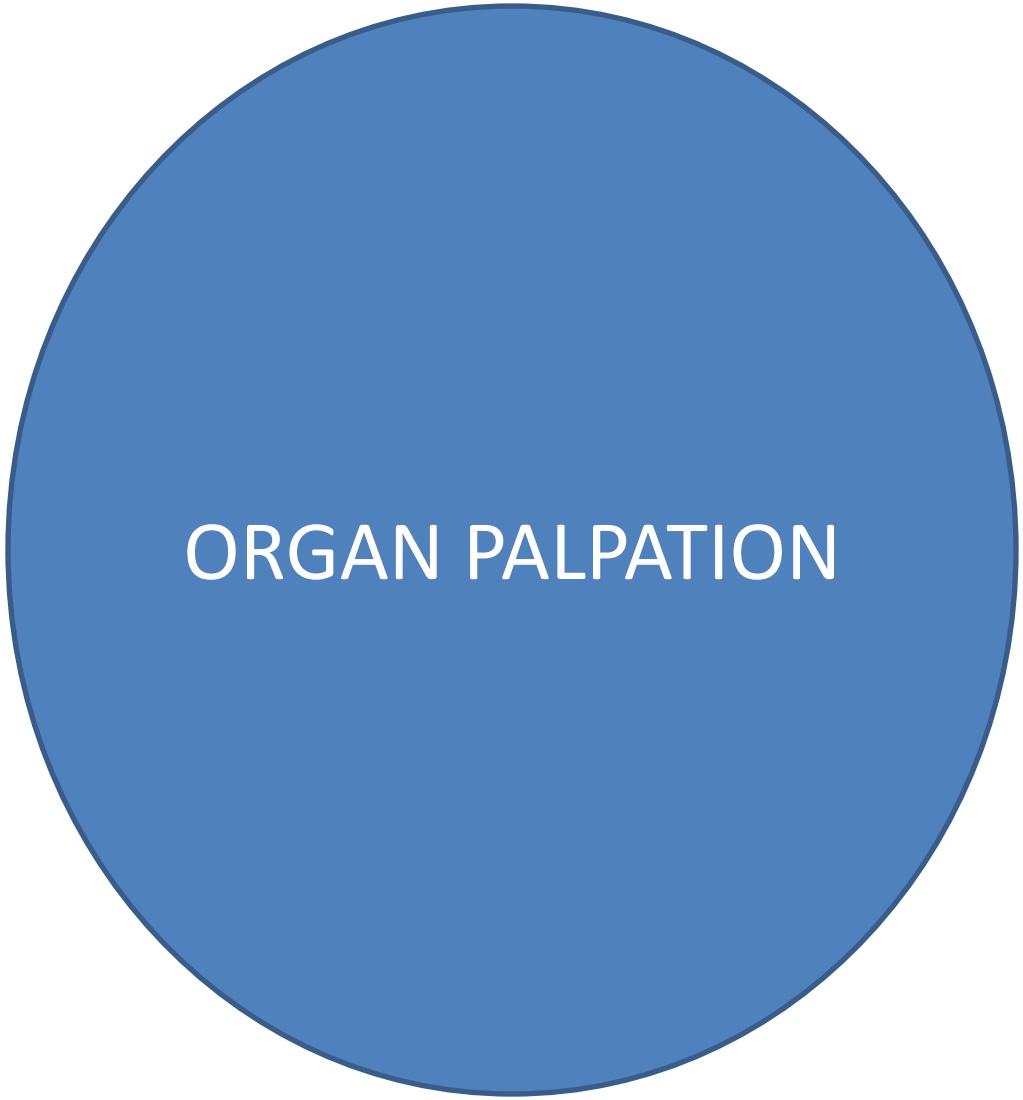


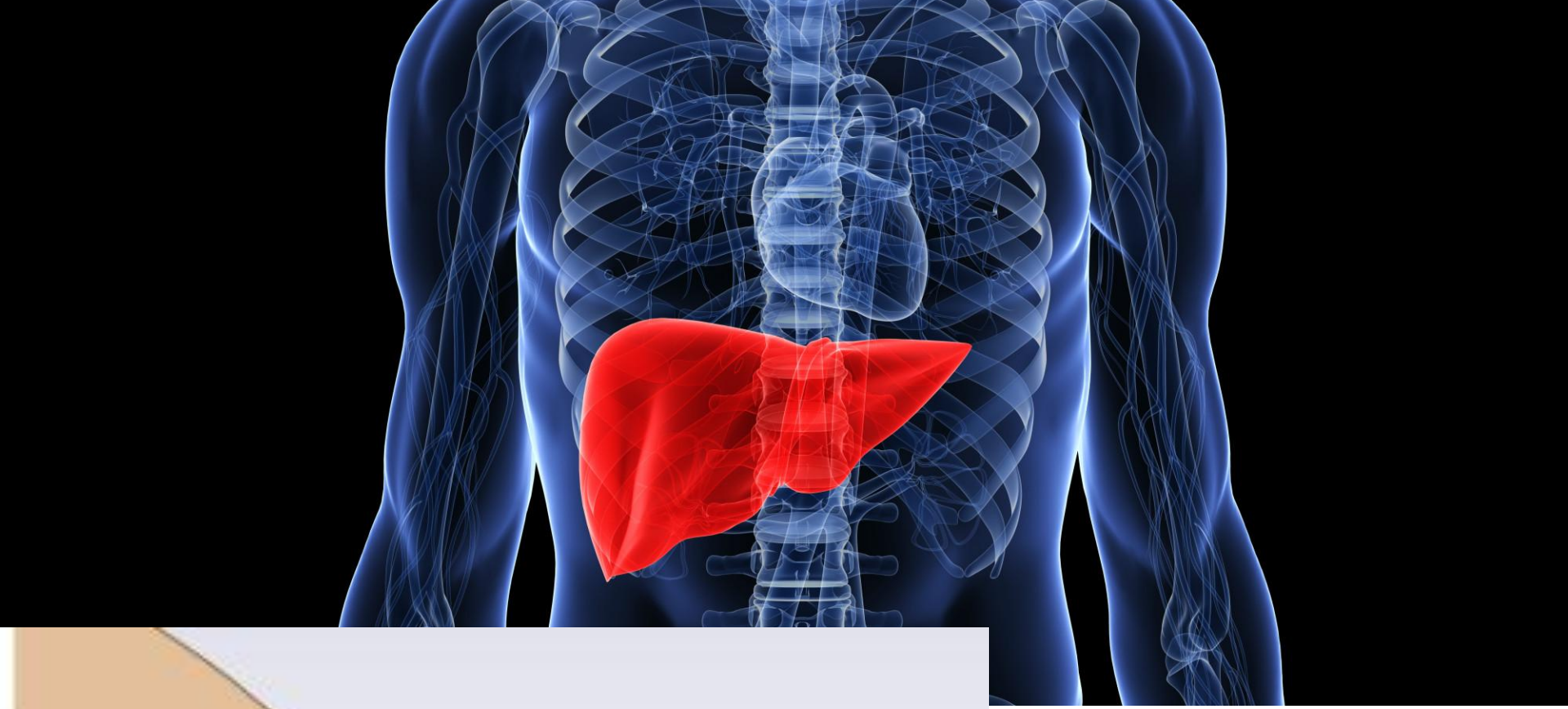
Extra abdominal- Prominent with head elevation



Now how will u describe the lump?

There is an intra-abdominal lump in epigastrium which 2X3 cm, spherical in shape having smooth surface, non tender, firm in consistency, freely mobile and not fixed with underlying structure or overlying skin .


ORGAN PALPATION



LIVER PALPATION

ORGAN PALPATION

According to Hutchison sequence of organ palpation will we left kidney –spleen –liver –right kidney then urinary bladder.

But we do liver –then spleen—right & left kidney –urinary bladder and para-aortic lymphnode

LIVER PALPATION

In examination if may ask separately to do liver and spleen palpation (without doing inspection or palpation) in this case u have do following step

U may start palpation sitting or kneel down or standing position

Stand right side

Introduced your self to the patient and take consent from the patient by telling that I m going to examination u for my purpose, it will not hurt u. I can proceed.

Now expose the patient and ask if there any pain present or not
ask the patient raised his head to identify the lateral border of Rectus abdominis muscle

Now turn the patient head to the left and instruct the patient to take deep breath keeping the mouth open
Now u can proceed two way

Place ur palmer surface of the hand keep it flat, and in such a way that tip of the fingers will directed toward right costal margin and ulnar border of the right hand will not cross the lateral border of rectus abdominis

or

Place ur palmer surface of the hand keep it flat, and in such a way that the lateral border of index finger will be parallel to right costal margin as well as tips of finger will not cross the lateral border of rectus abdominis

❖Now press the hand inward and forward and keep steady when patient take deep breath and at the height of inspiration release the inward pressure and keep forward pressure in such way that your hand will be moved up and down with respiration

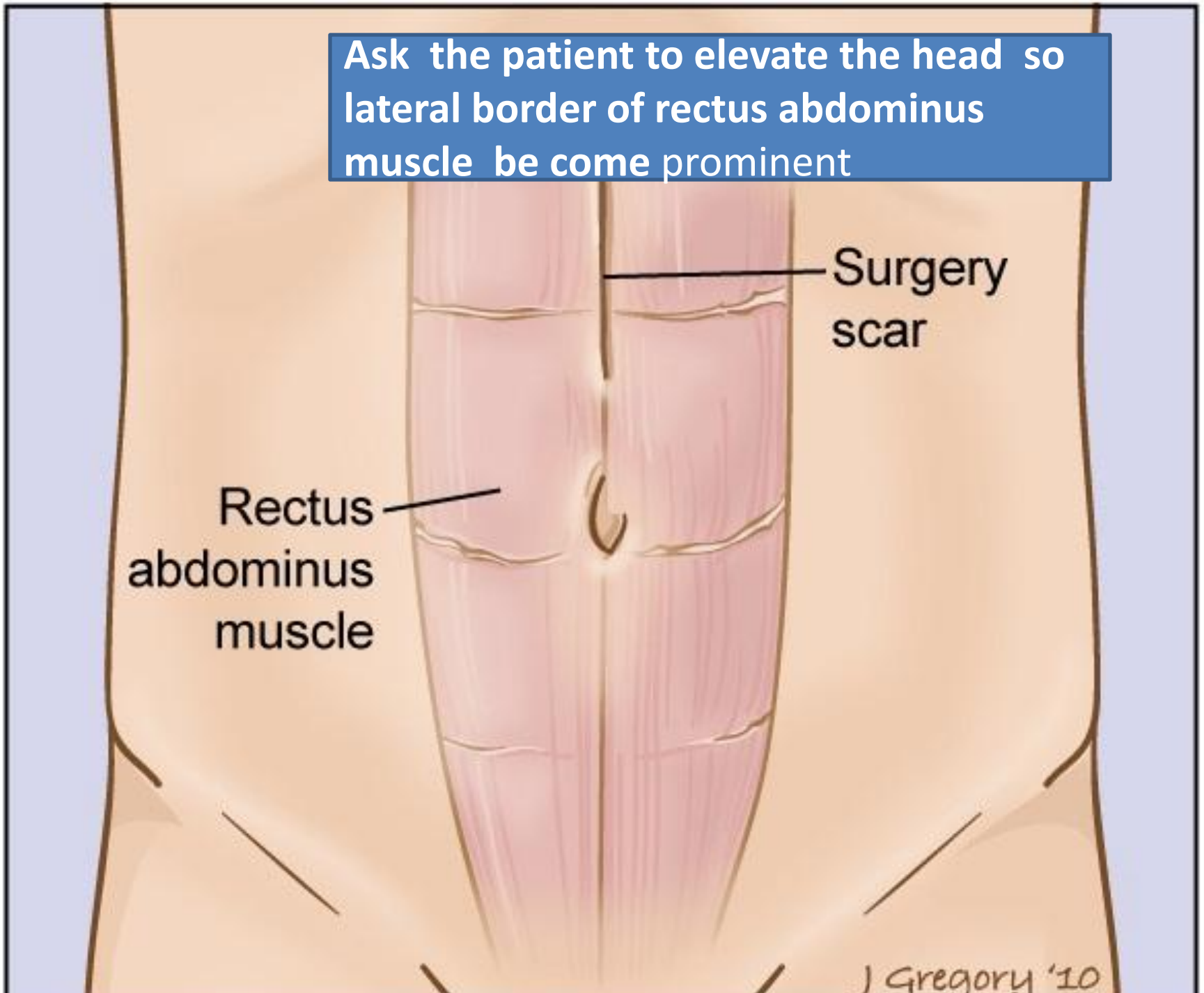
.

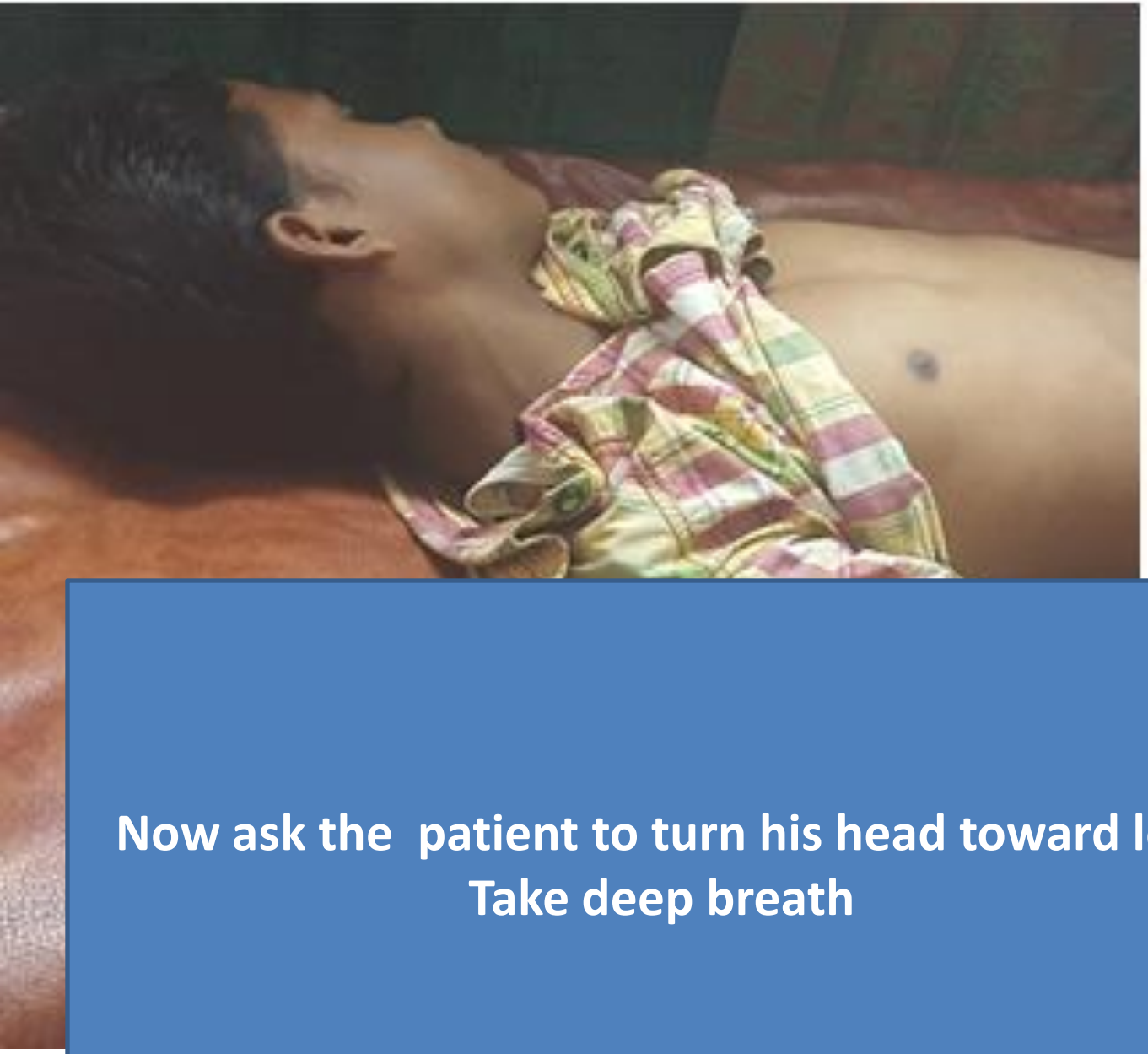
❖Move forward during expiration.

❖if u not find liver go forward until radial border of index finger comes contact with right costal margin and follow the costal margin up to left mid clavicular line

❖If u find liver is palpable then u have to see the following

- First follow the margin to see right lobe or left lobe or both lobe is enlarge
- Measure its length in cm from right costal margin at mid-clavicular line and from xephoid process
- Now feel the liver with palmer surface hand and look at face to see **tenderness , surface , consistency**


Ask the patient to elevate the head so lateral border of rectus abdominus muscle be come prominent
Surgery scar
Rectus abdominus muscle
J Gregory '10



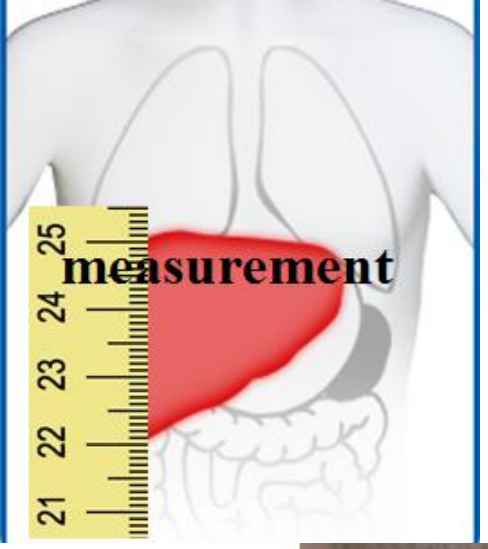
Now ask the patient to turn his head toward left
Take deep breath

What will you do if u get a palpable liver

- If u find liver is palpable then u have to see the following
  - First follow the margin to see right lobe or left lobe or both lobe is enlarge
  - Measure its length in cm from right costal margin at mid-clavicular line and from xephoid process
  - Now feel the liver with palmer surface hand and look at face to see **tenderness , surface , consistency**

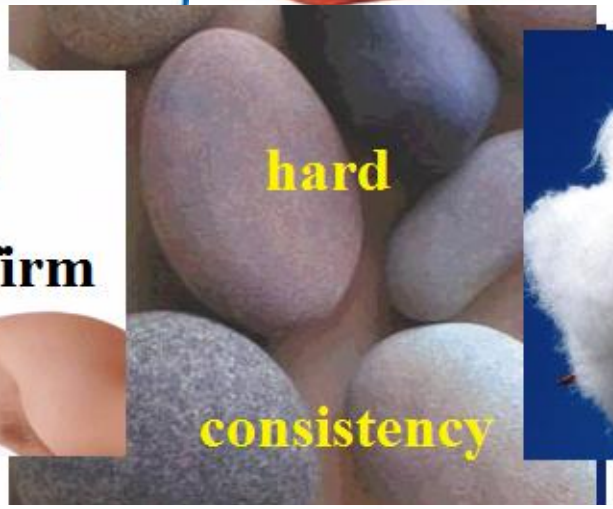
What will u see in liver palpation: To remember it --MMS CUT AS U must memorized	
M---Margin	Sharp or rounded
M—measurement	
S—Surface	Smooth , irregular –secondaries ,
C--Consistency	Soft , firm , hard
U---upper border of liver Dull ness	
T---tenderness	
A---auscultation -hepatic bruit	
S—liver span --	

Palpation of the liver of this middle cachetic person reveals that the liver is enlarge(say palpable if span > 13cm) which is 7cm from right costal margin at mid clavicular line and 5 cm from Xephoid process non tender , having smooth surface , firm in consistency , sharp margin ,upper border of liver dullness is in 5^{th} intercostals space , liver span is 15 cm and no hepatic bruit .


measurement
25
24
23
22
21

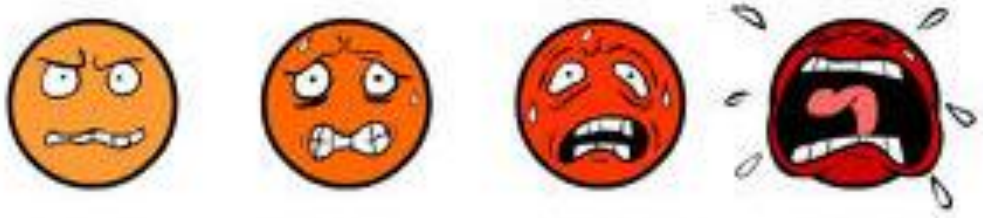

margin
sharp
rounded


firm

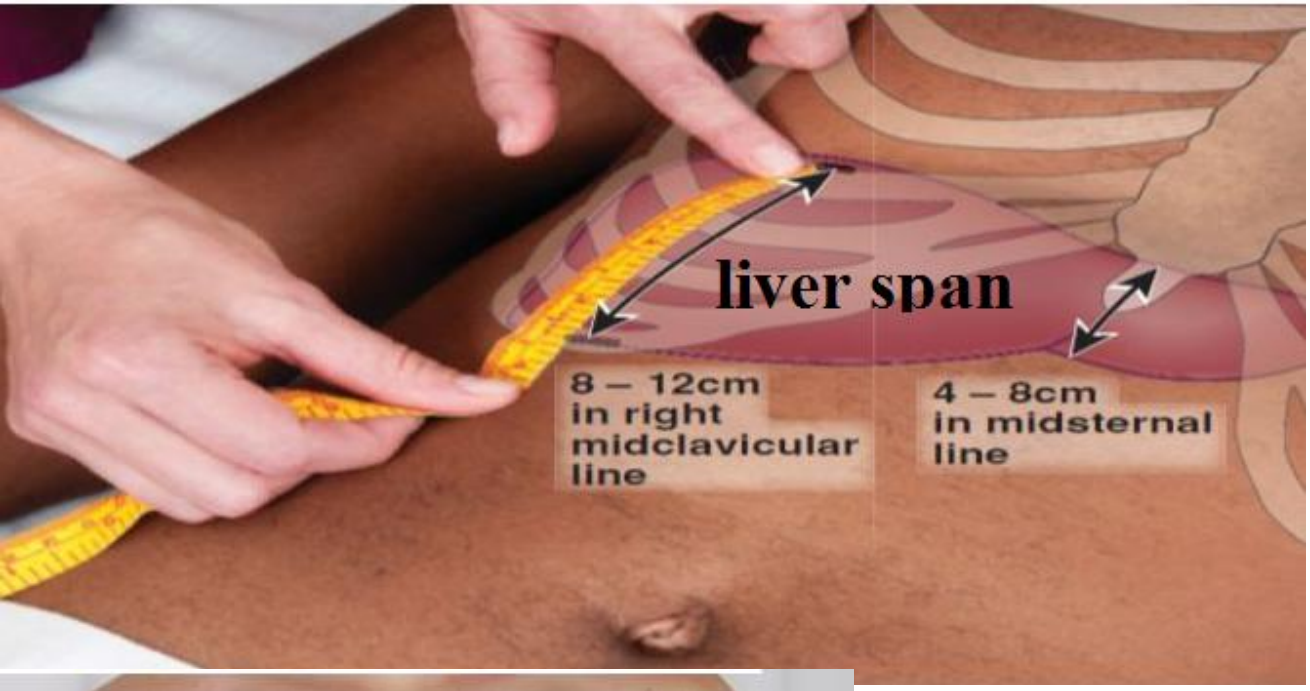

hard
consistency

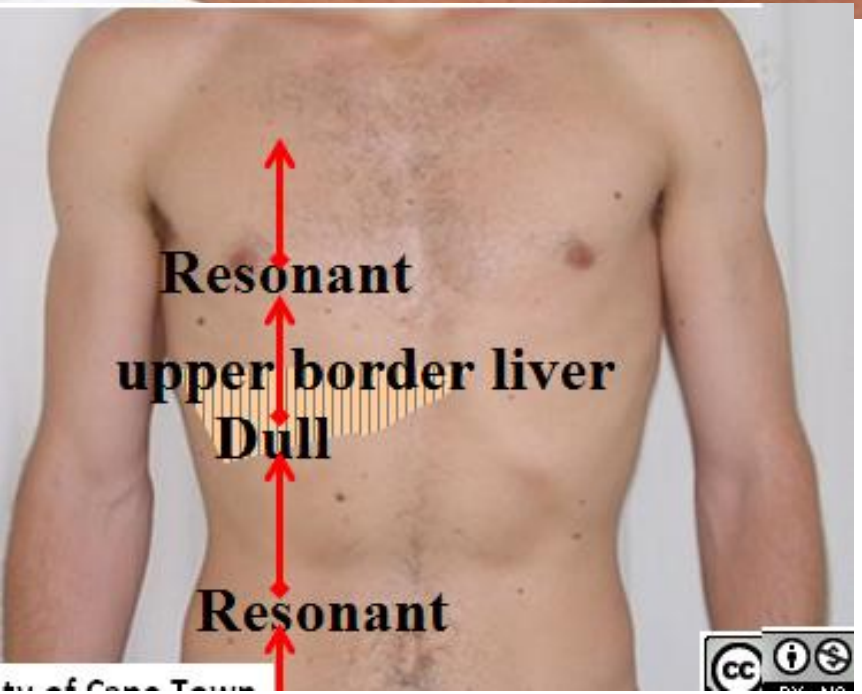

soft

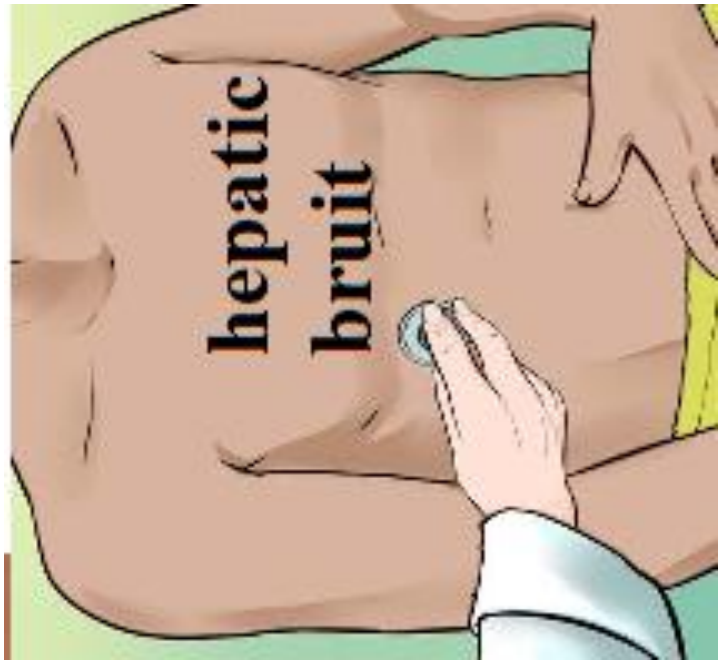

surface
irregular
smooth



tenderness


liver span
8 – 12cm
in right
midclavicular
line
4 – 8cm
in midsternal
line


Resonant
upper border liver
Dull
Resonant


hepatic
bruit

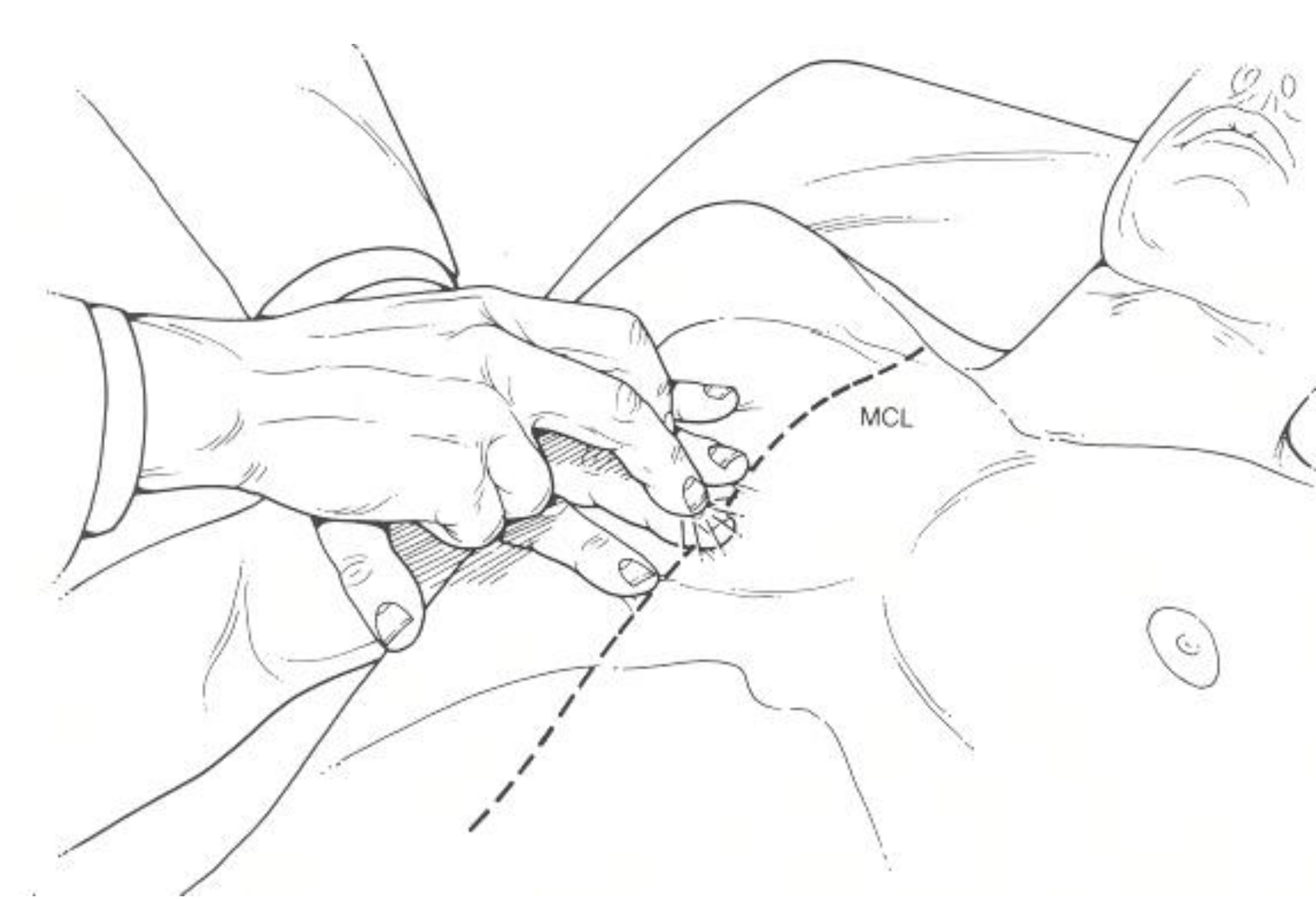
Now percuss on right chest to identify the **upper border of liver dullness**

Step.1-start percussion on right chest from above to downward until percussion note become dull .

Step.2-When it become dull keep left finger in that place

Step .3--Now identify the sternal angle (gently rub the right thumb over menubrium sternum and u feel elevated ridge that is the sternum angle)

Step 4.Now go to the right side u will find the right 2^{nd} rib and below it 2^{nd} intercostals space and count downward space up to left finger

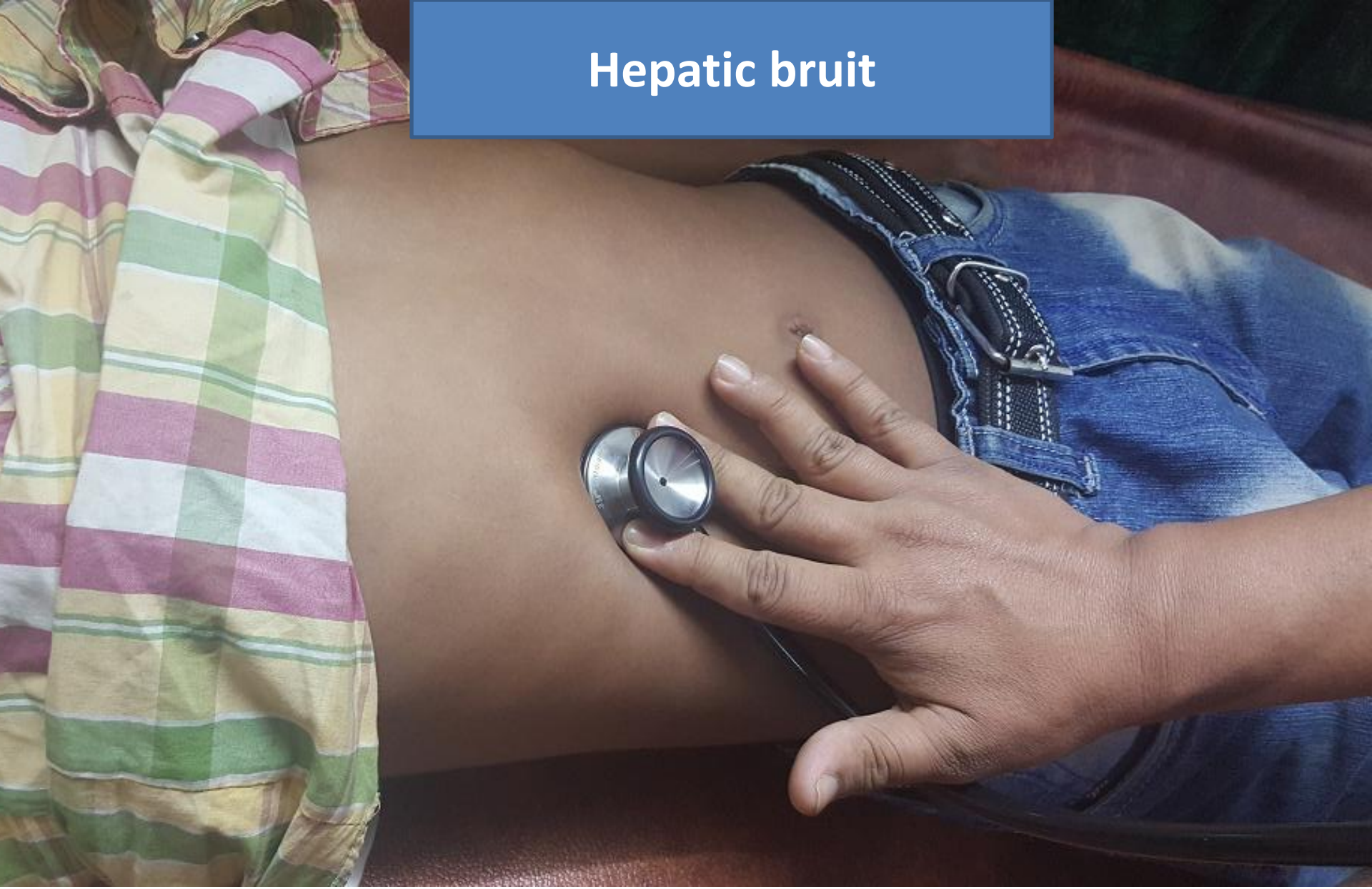

MCL

e) Now measure **liver span**: From upper border of liver dullness up to palpable lower border of Liver. Normal 13 cm and if span is > 13 cm then liver is enlarge

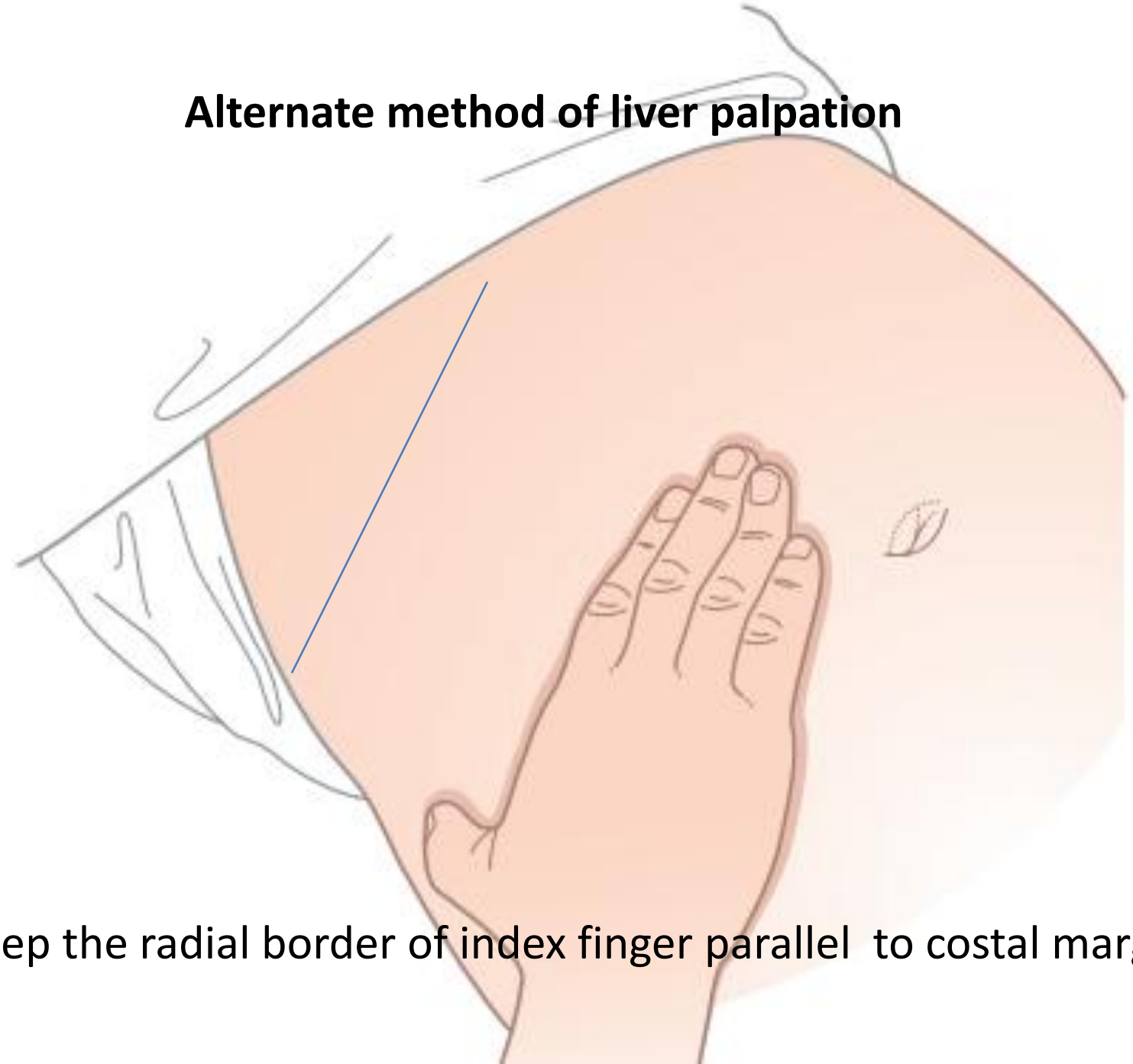
f) **Hepatic bruit**:

See with bell of the stethoscope or diaphragm of

Hepatic bruit

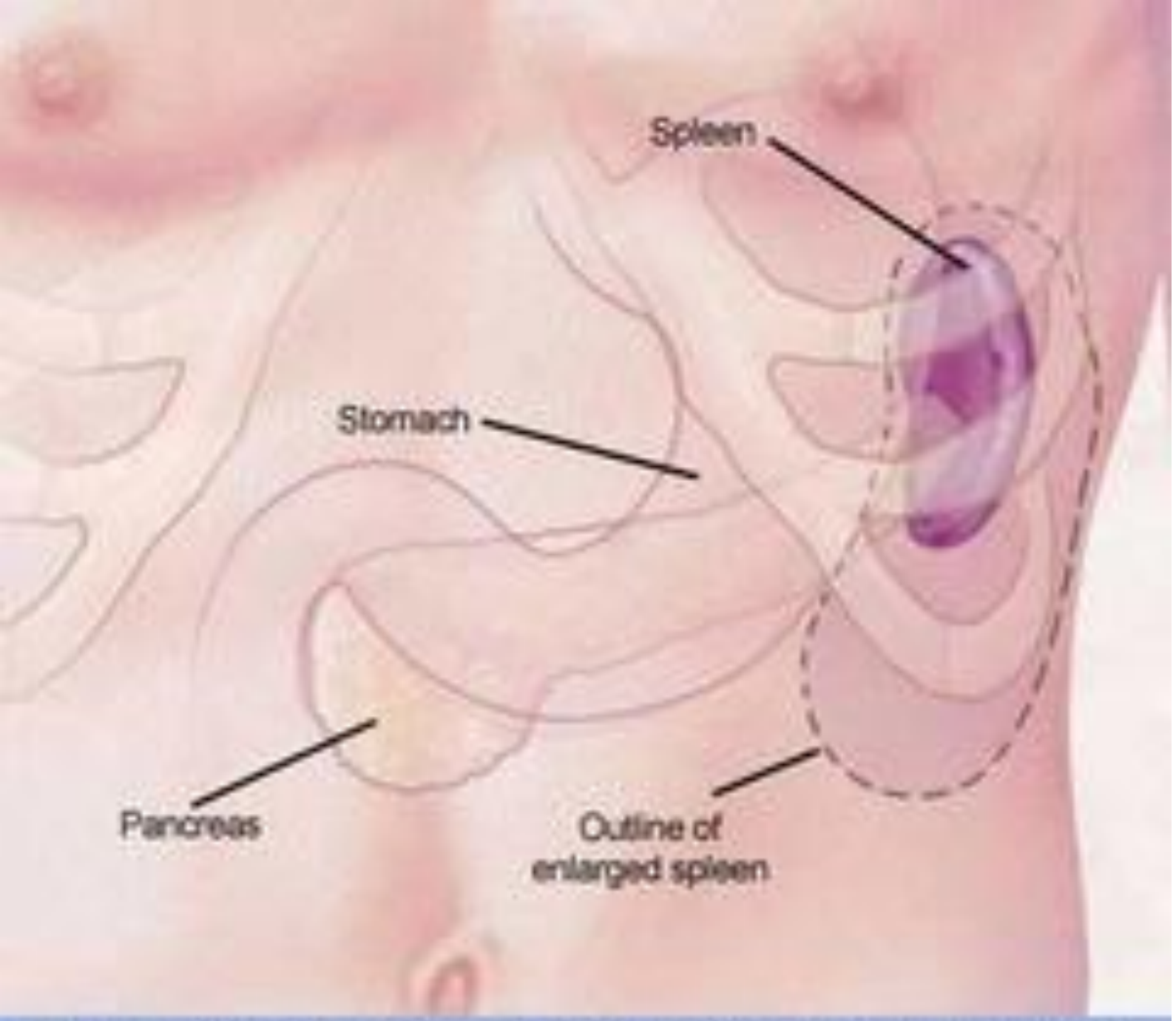


Alternate method of liver palpation



Keep the radial border of index finger parallel to costal margine

Palpation of spleen



In examination if may ask separately to do liver and spleen palpation (without doing inspection or palpation) in this case u have do step

1. Stand right side
2. Introduced your self to the patient and take consent from the patient by telling that I m going to examination u for my purpose, it will not hurt u. can I proceed.
3. Now expose the patient and ask if there any pain present or not
4. Now turn the patient head to the left and instruct the patient to take deep breath keeping the mouth open
5. keep your left hand over left lower thoracic cage to give support
6. Place your right hand on right iliac fossa keeping the direction of tip of the finger toward 10^{th} rib. and palmer surface of the hand keep flat that means whole the hand will touch the abdomen
7. Now give down ward and forward pressure during inspiration and go forward during expiration until your tip of fingers come contact with spleen.
8. during inspiration try feel with spleen

9. If spleen not found then go up to left costal margin
10 .If still not found then turn the patient to right lateral position
11. keeping right leg extending and e and hip flexion of left leg . Now palpate for the just palpable spleen. Put your finger just below left costal margin and ask to take deep breath when spleen is palpable then do the following measure it from left costal margin at ant axillary line toward umbilicus or along its long axis
12. **look for notch , feel surface , tenderness , and consistency Try to insert the finger between in costal margin and spleen**
13. percussion over the spleen : start at lower left chest and goes to down ward toward the spleen Next see splenic rubs with the bell of the stethoscope.

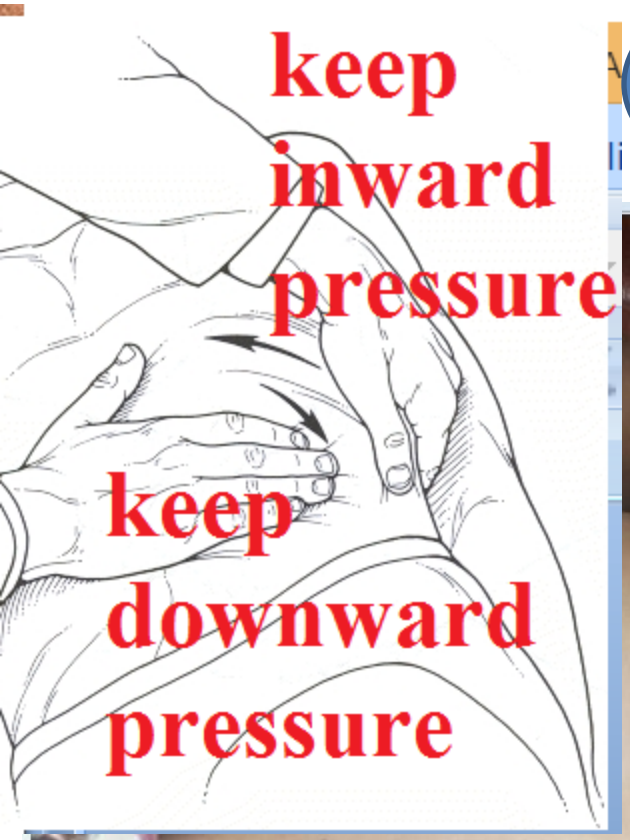

Keep left hand over
left 9,10,11 rib
Proceed this way
Keep right hand
on right iliac fossa

STEP 1


STEP 2

STEP 3

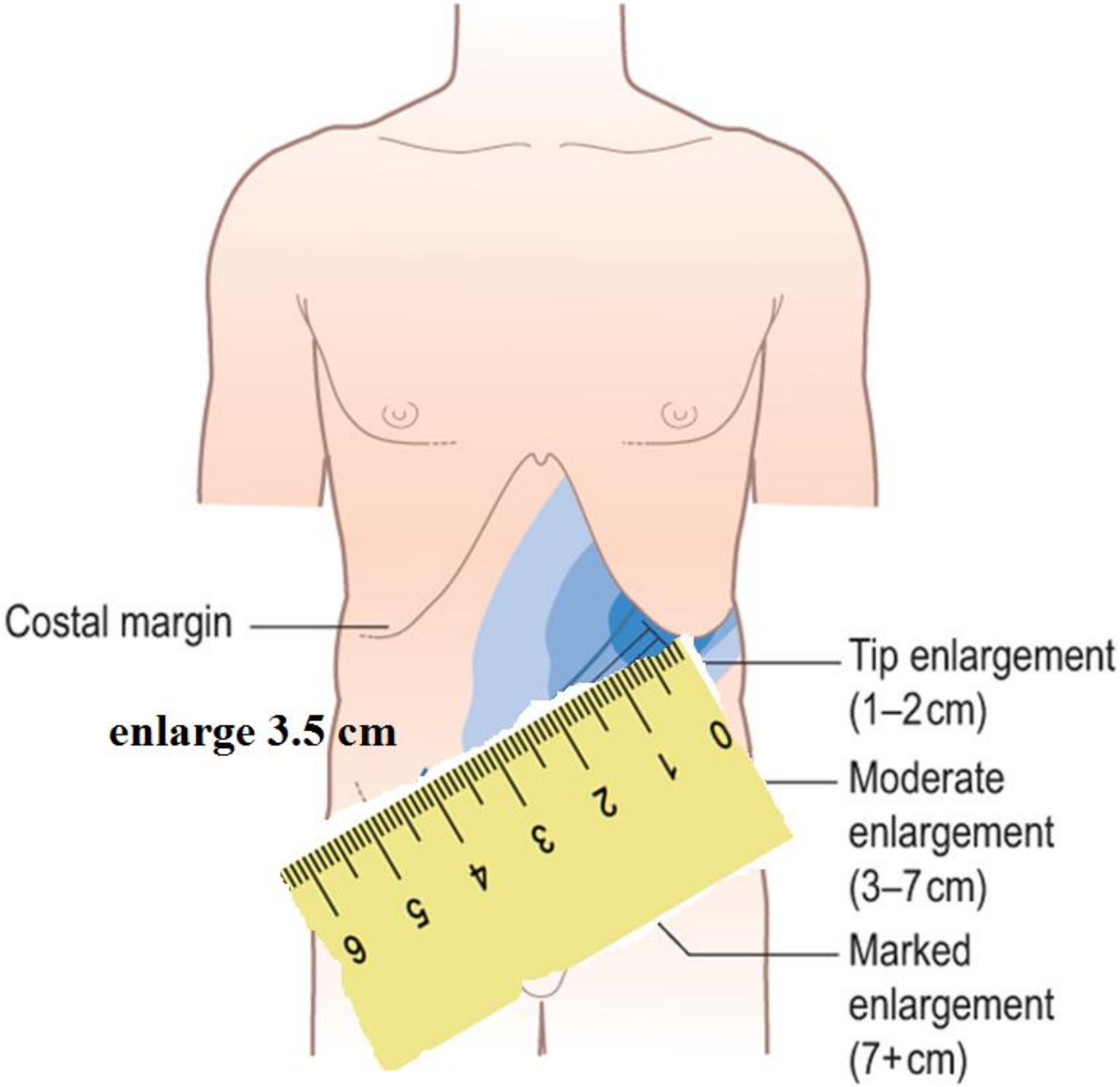
STEP 4



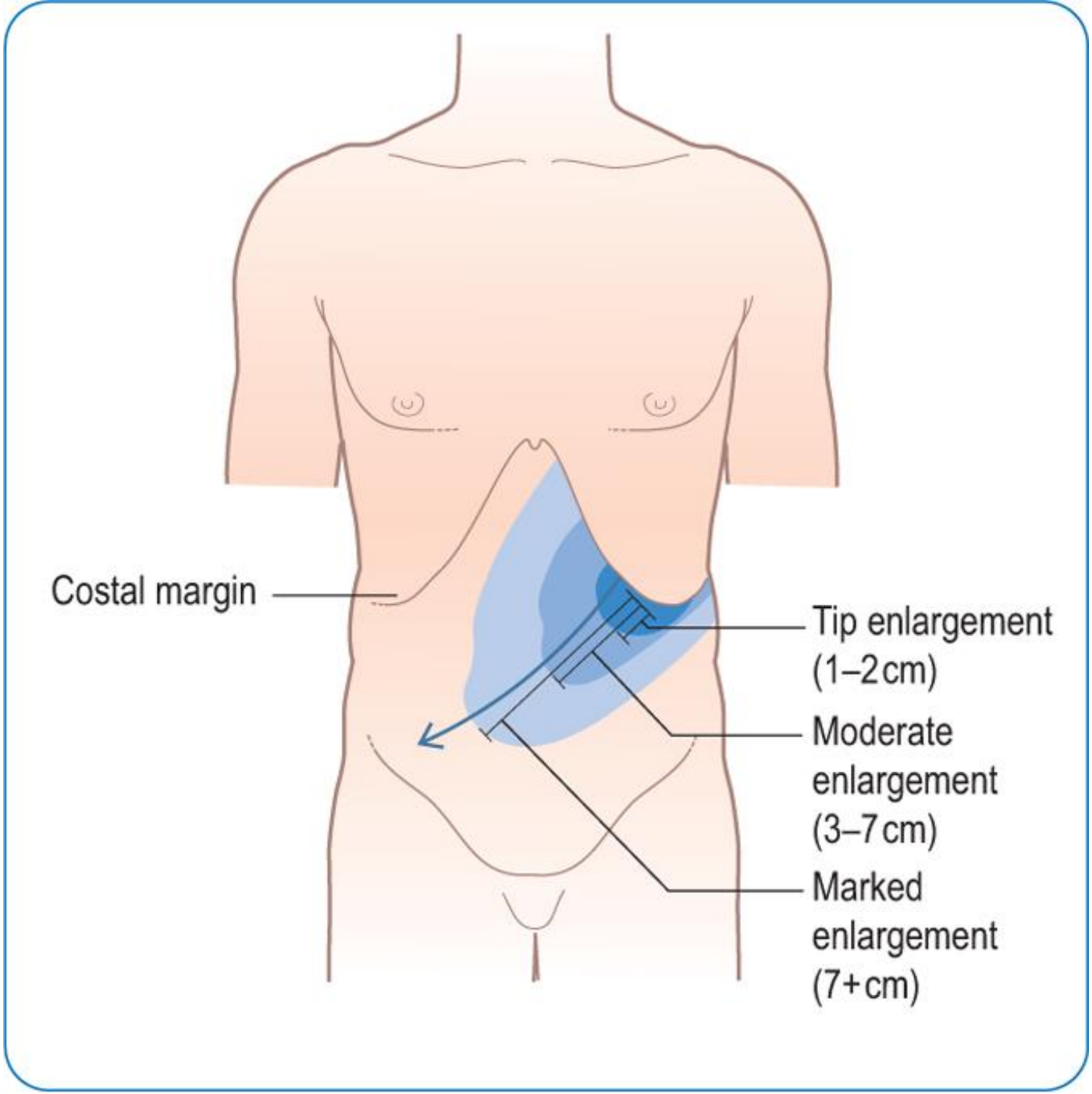

STEP 5


STEP 6


STEP 7


Costal margin
enlarge 3.5 cm
Tip enlargement
(1–2 cm)
Moderate
enlargement
(3–7 cm)
Marked
enlargement
(7+ cm)
0
1
2
3
4
5
6


percusion
over
spleen



Measurement	
Margin	
Notch	
Surface	
Consistency	
Tenderness	
Percussion	
Bimanually ballotable	
Finger insinuation	
Splenic rub	

What do u mean by splenomegaly and hypersplenism ?

Splenomegaly : enlargement of spleen

Hypersplenism : Pancytopenia (reduced WBC , platelet and anemia or reduced RBC) due to enlargement of spleen

Spleen is palpable when it more than twice of it normal length

Enlargement of spleen is

Mild < 4cm,

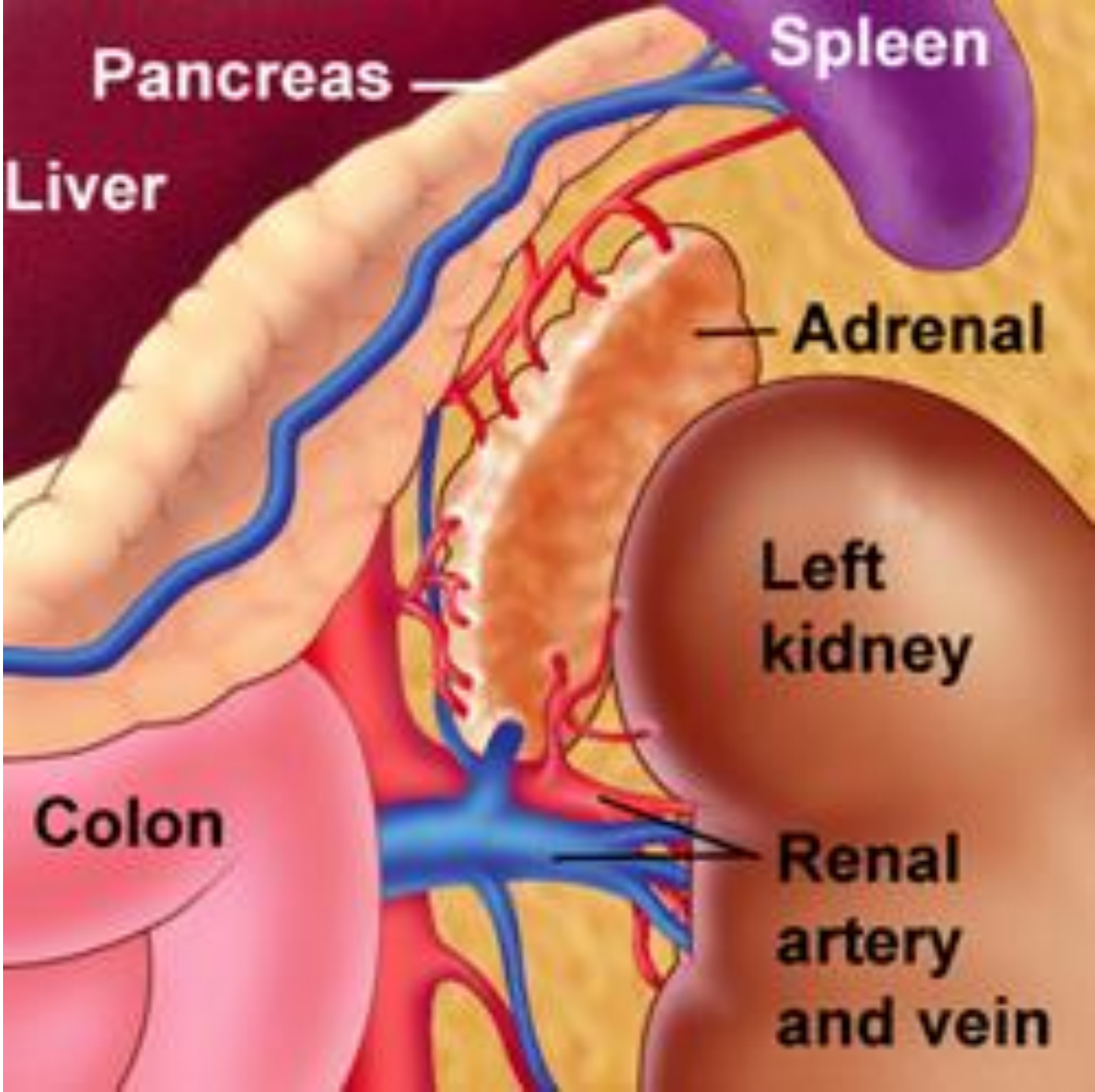
Moderate 4-8,

Huge > 8 cm or it cross the umbilicus

How will u differentiate between spleen and kidney

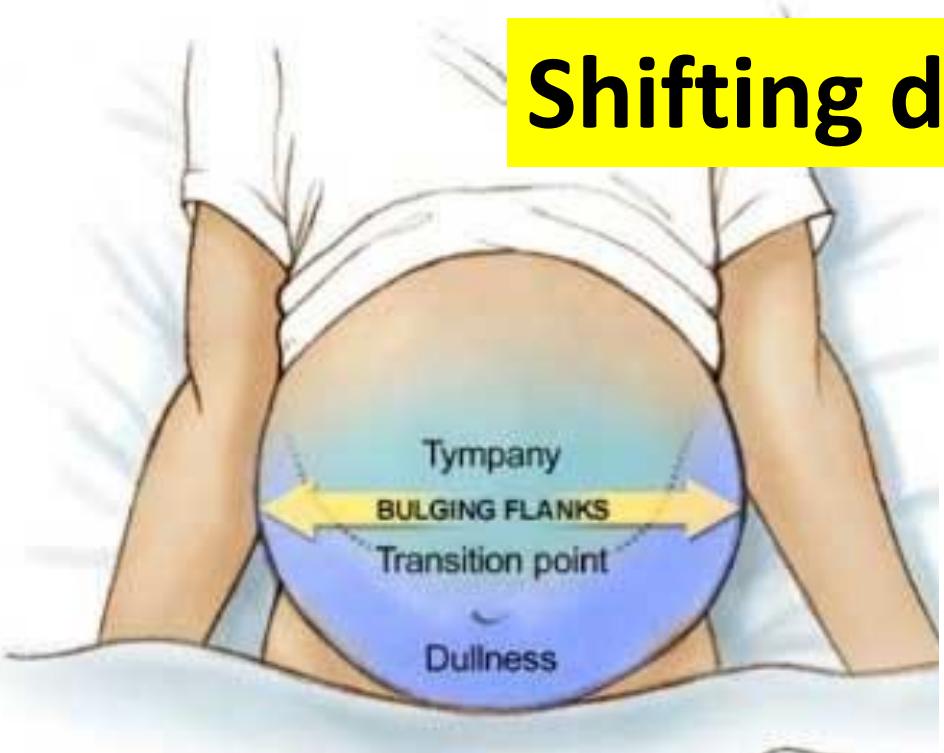
Difference Between

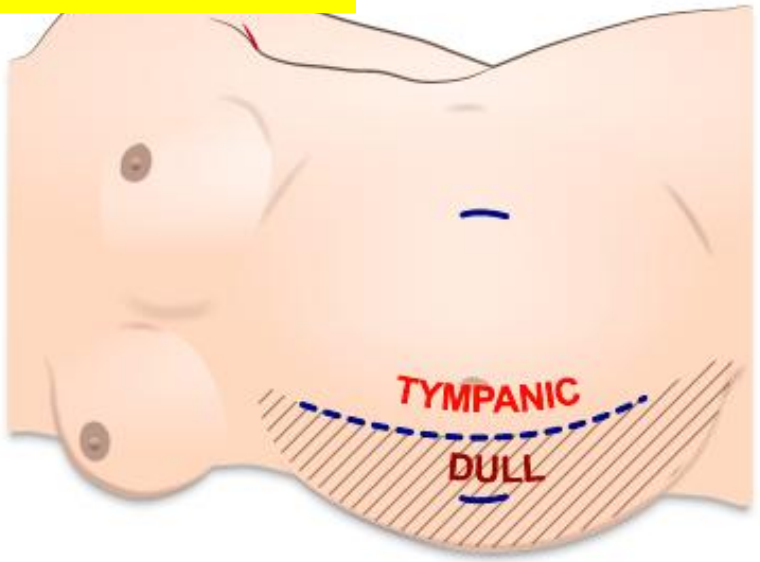
Left kidney & Spleen

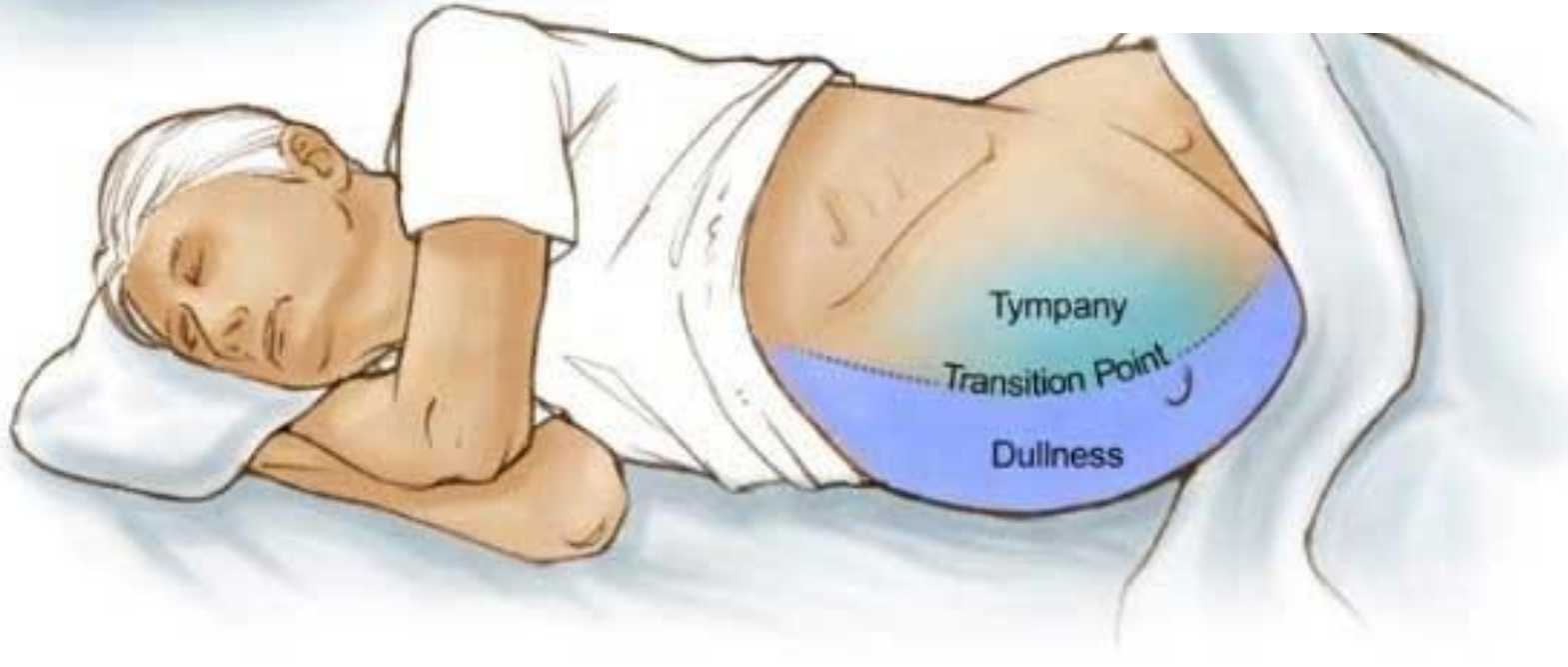


How will u differentiate between spleen and kidney		
	Spleen	Kidney
1. Finger insinuation	Not possible	Possible
1. Bimanually palpable	Not	Yes
1. Percussion	Dull	Band of resonance due to overlying colonic gas
1. Direction of Enlargement	Toward the umbilicus	Downward
1. Move with respiration	Early move with respiration	Move at the end of respiration

Shifting dullness







Sifting dullness

To remember it 2 and ½ patch

Step.1: keep the pt in dorsal position

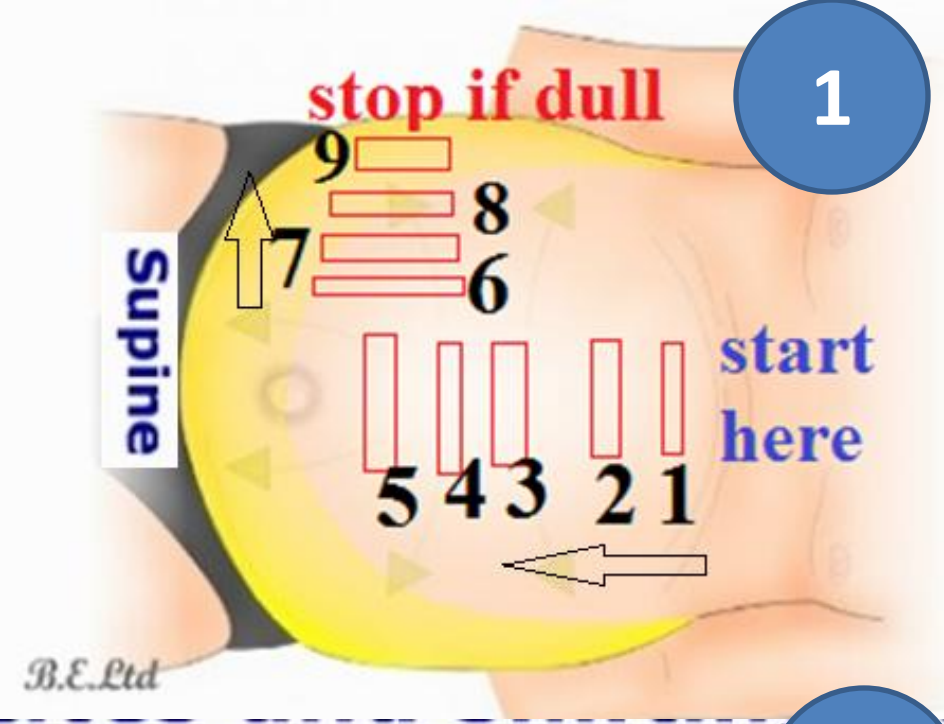
Step 2: Start percussion from epiastric region along the mid line up to umbilicus

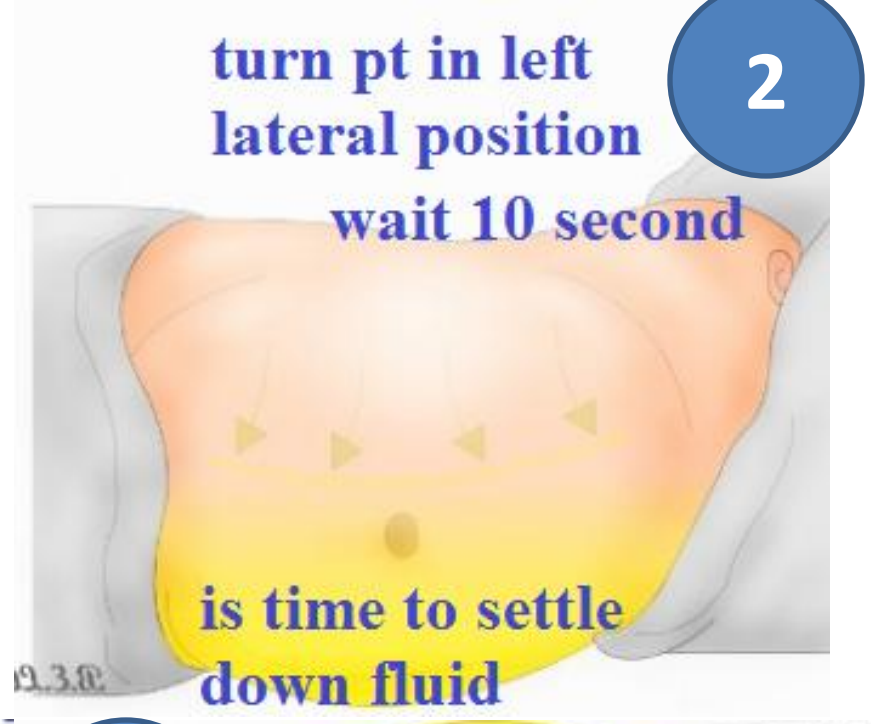
Step 3: As soon as u reach the umbilicus then do percussion to the right sided or left side as u want Until dullness appear (if u don't get dullness stop just before the lateral border of muscle)

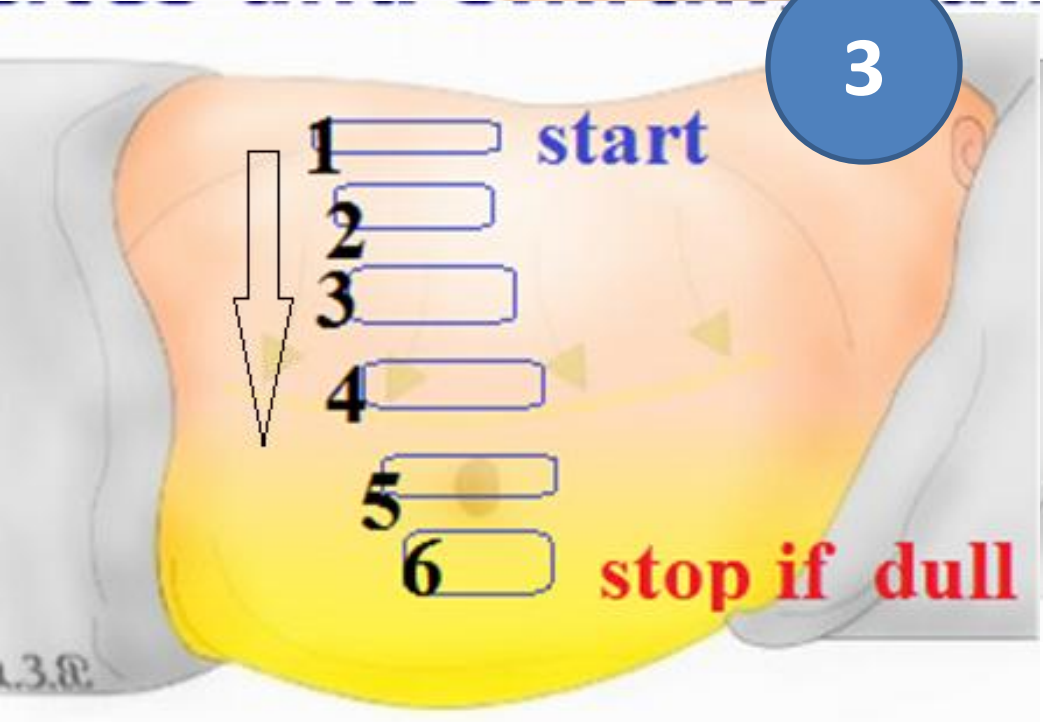
Step 4: Turn the patient in left lateral position keep at least 20 second (in Macleod's 10 seconds)

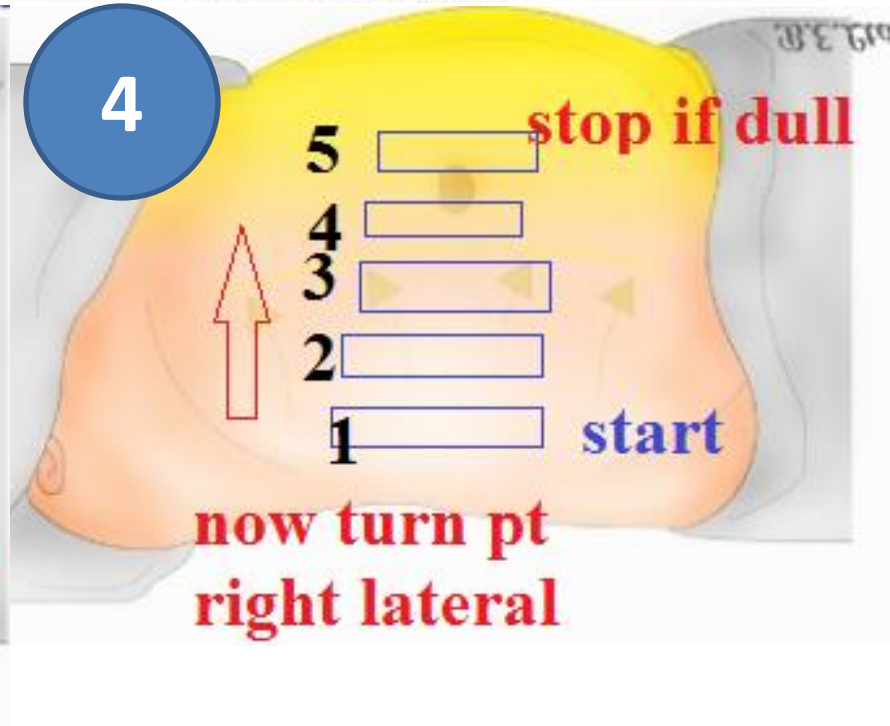
Step 5: Then percussion down ward toward left until dullness reappear .

Step 6: Again turn to right and percussion downward until dullness reappear


1
stop if dull
9
8
7
6
Supine
start
here
5 4 3 2 1
B.E.Ltd


2
turn pt in left
lateral position
wait 10 second
is time to settle
down fluid


3
1
start
2
3
4
5
6
stop if dull

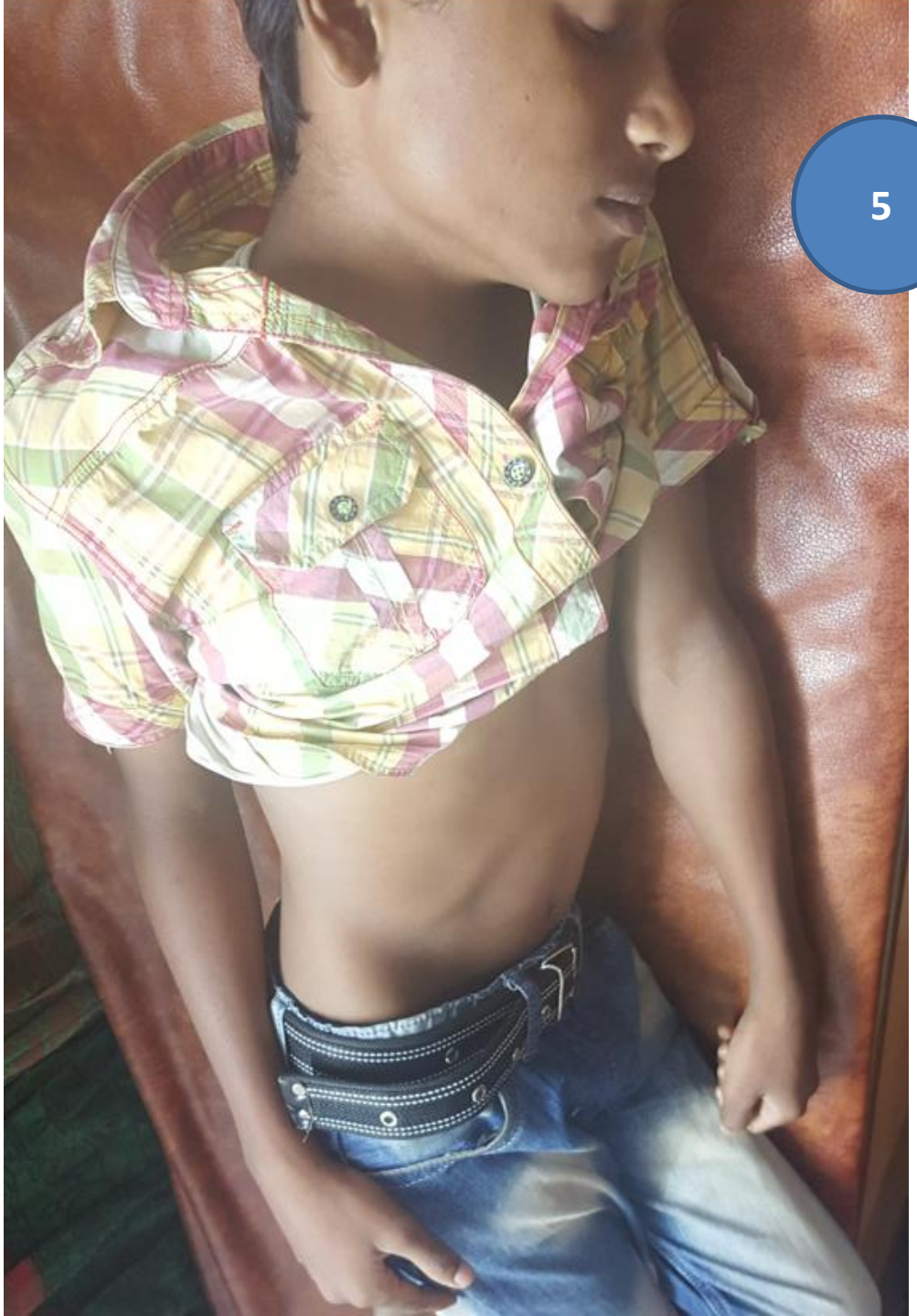

4
5
stop if dull
4
3
2
1
start
now turn pt
right lateral


1

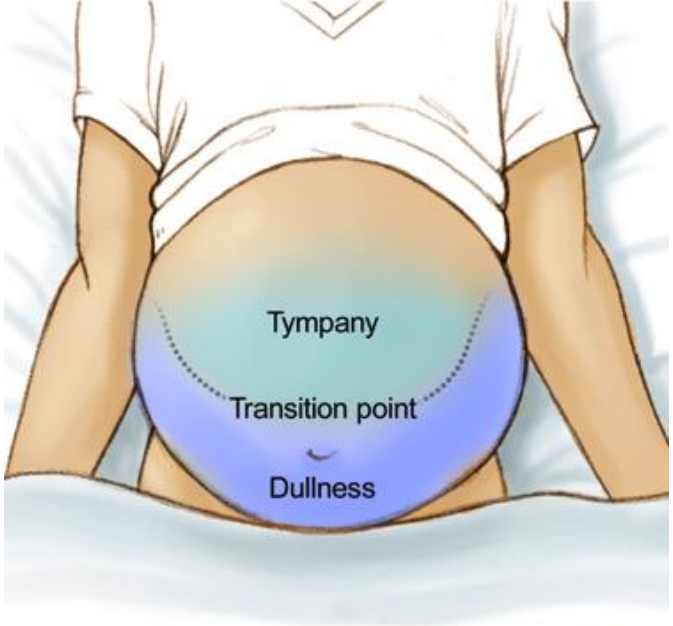

2

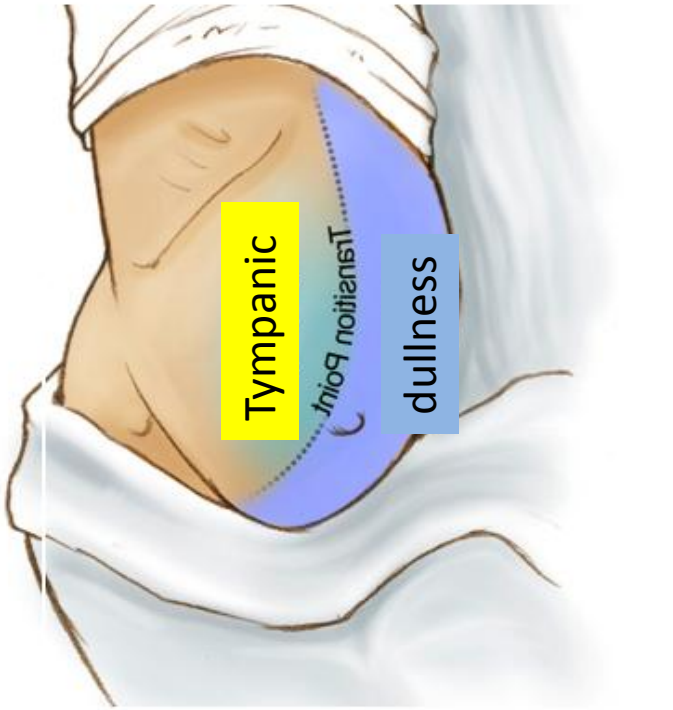

3


4



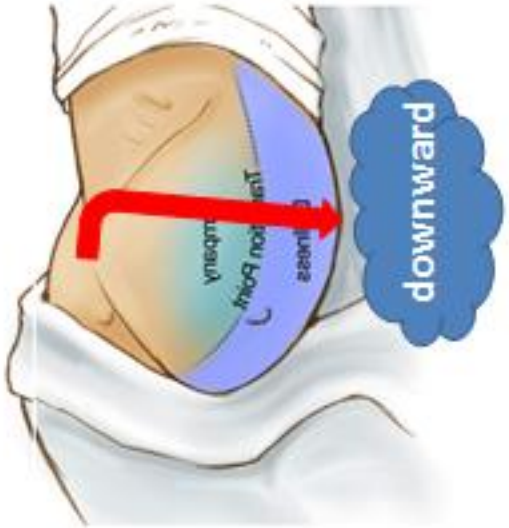
5

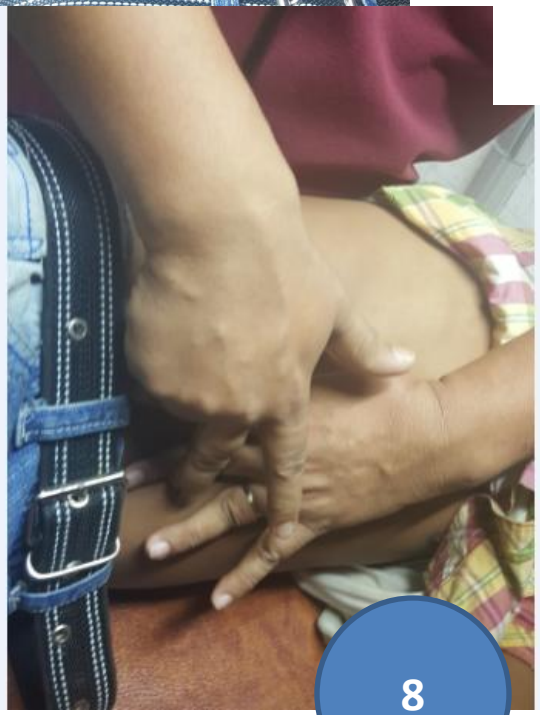

Tympany
Transition point
Dullness


Tympanic
Transition Point
dullness

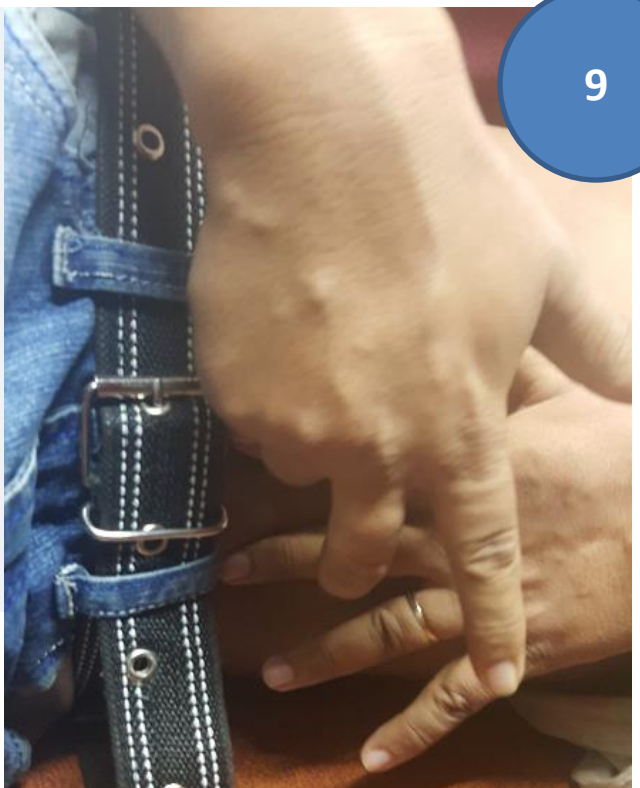
6

7



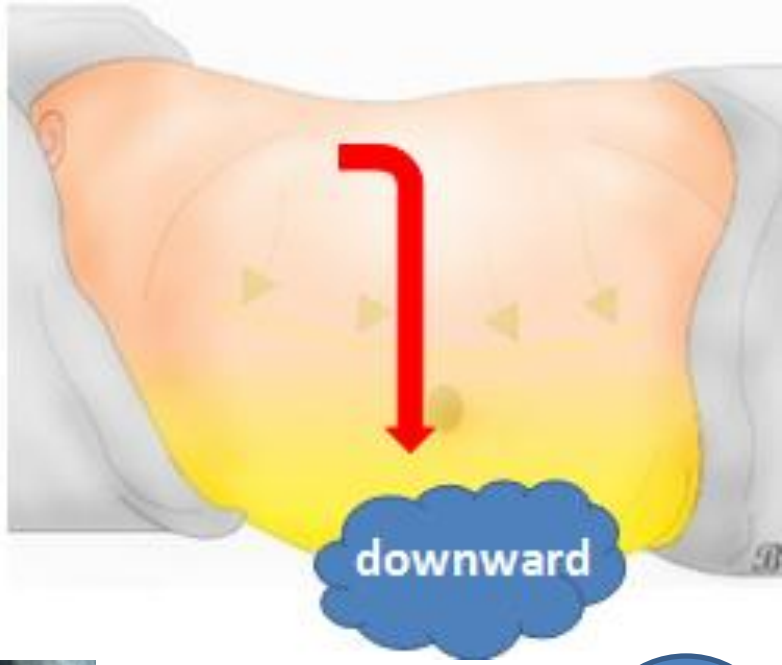


8



9

11



Fluid thrill

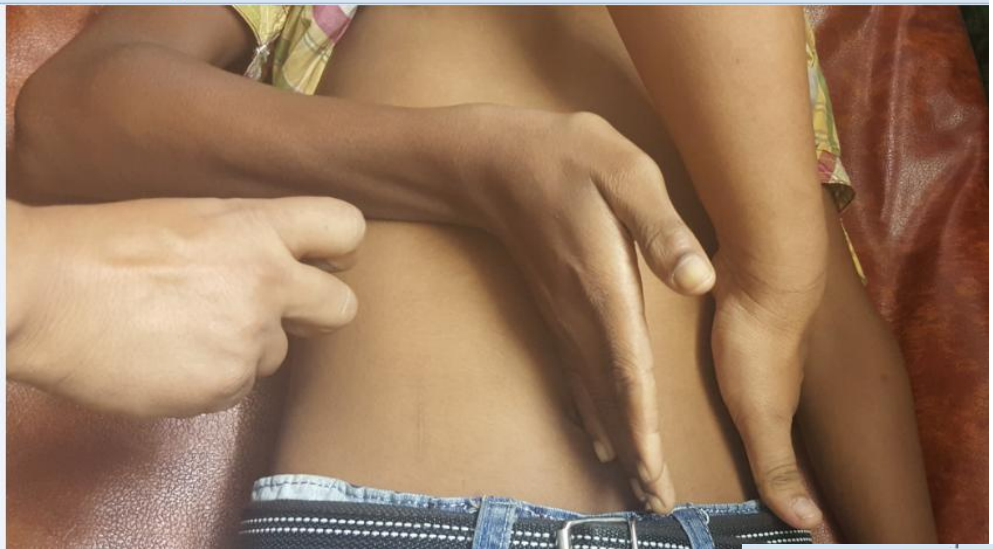
See fluid thrill:

Step one: Place patient hand at mid line of the abdomen at semi prone position keeping slightly inward pressure .

Step two: Place your left hand flat against left flank.

Step three: Now strike with index or middle finger.

Step four: Feel vibration of wave of water with palmer surface of left hand.



Why patient hand is give at midline?

To prevent transmission of impulse via subcutaneous or skin

When fluid thrill present ?

It present in tens ascites

Also in large ovarian cyst

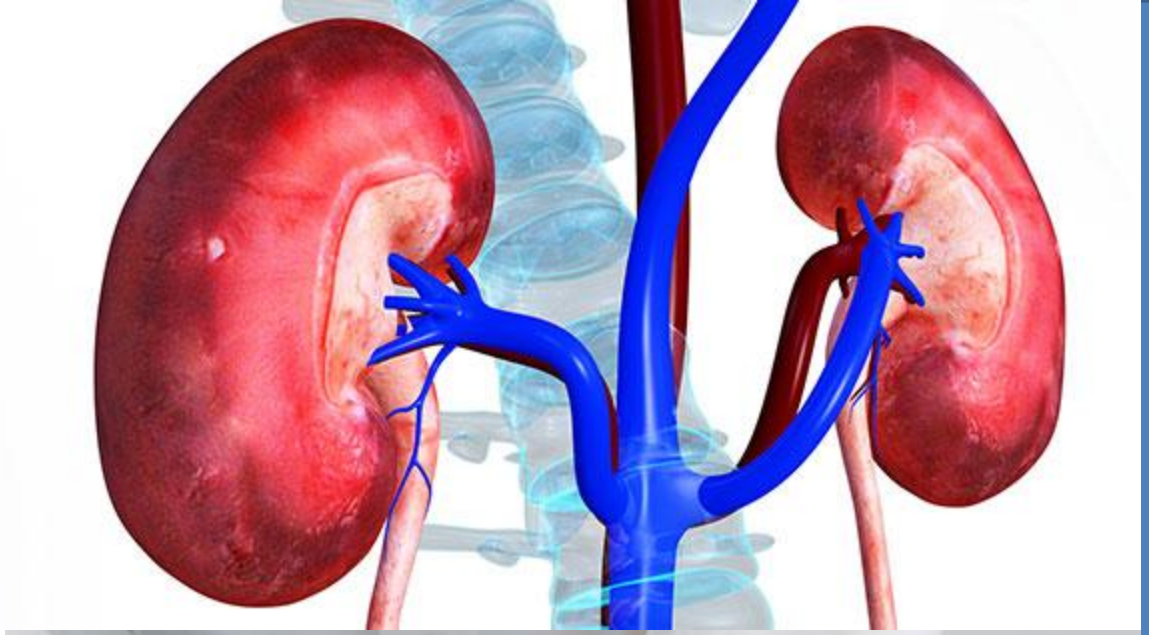
Box 12.4 Clinical features of marked abdominal swelling

Gross ascites

- Dull in flanks
- Umbilicus everted and/or hernia present
- Shifting dullness positive
- Fluid thrill positive

Large ovarian cyst

- Resonant in flank
- Umbilicus vertical and drawn up
- Large swelling felt arising out of pelvis which one cannot 'get below'

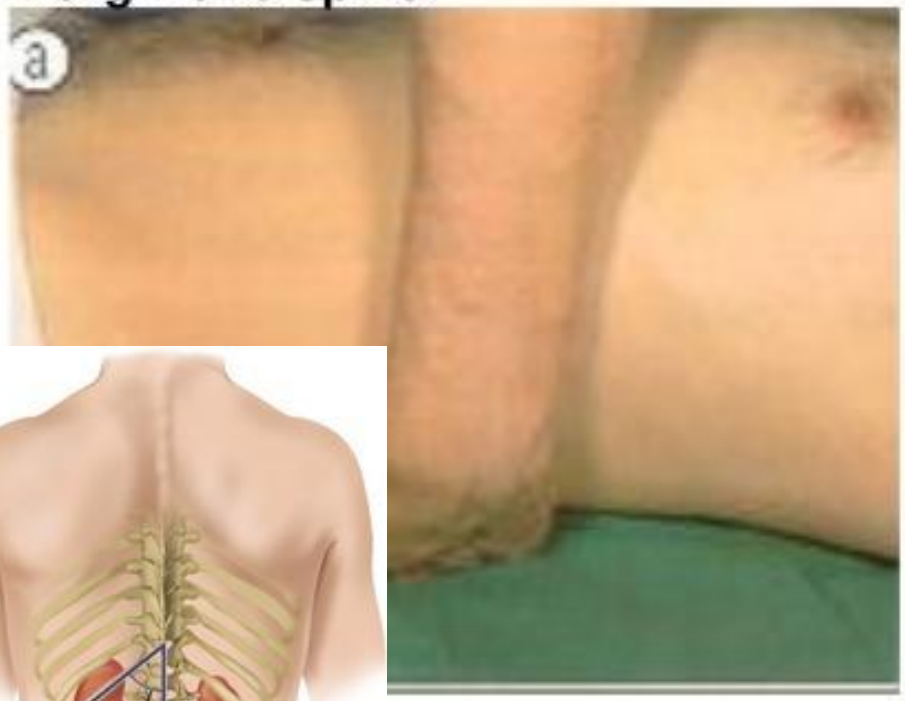


KIDNEY

Bimanual examination of the kidneys 1

One hand under the patients flank, fingers in the renal angle (between posterior costal margin and spine

The other hand with fingers flat placed below the costal margin, lateral to the rectus muscle



Hands should be opposite one another

palpate the kidney:
We is palpate by using the both hand

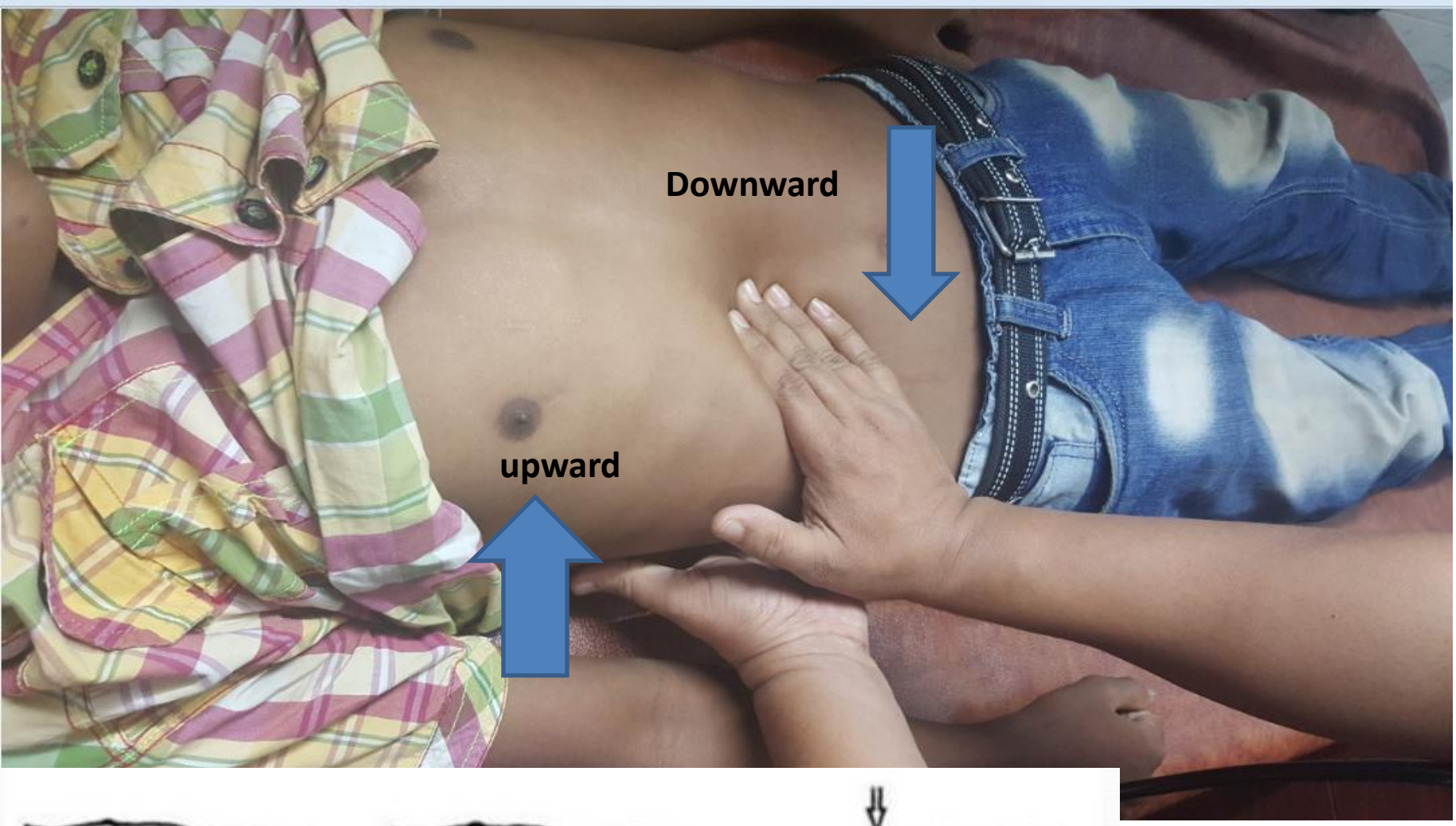
For right kidney
Step one. Place left hand behind the pt back just bellow the costal margin

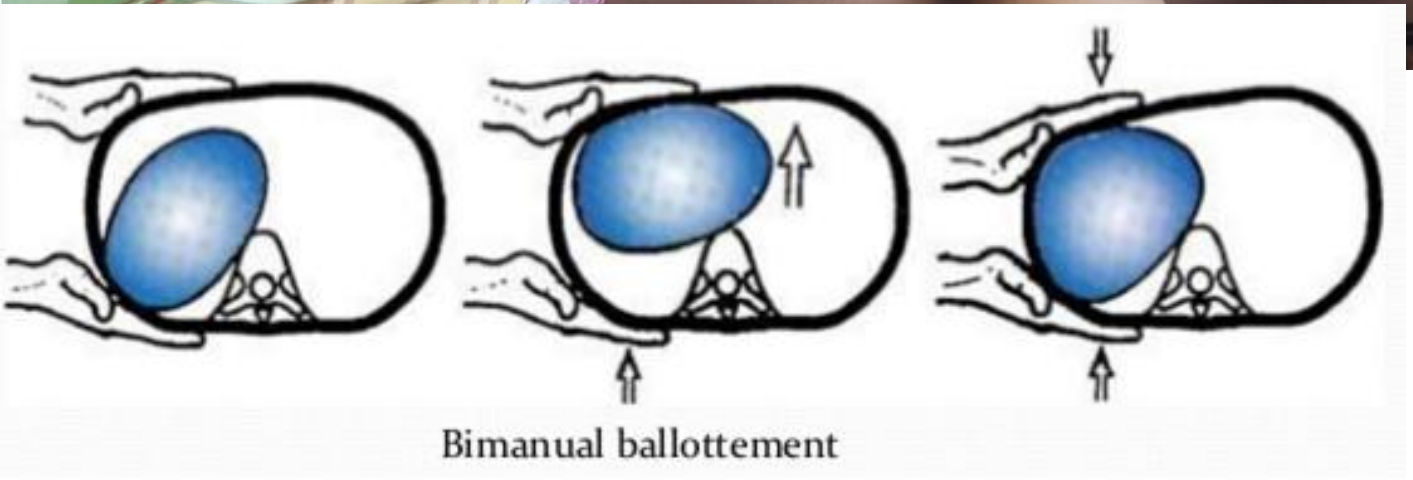
Step two. Now place right hand over the upper quadrant in such way that tip of the finger not touch The lateral border of rectus abdominis muscle and lower border of the hand doest not cross the umbilicus.

Step three: During expiration push your two hands together

Step four: Ask the patient to take deep breath and in inspiration u will feel lower pole of kidney Moving down ward In between two hands
.
Step Five: Now to see balloting push the kidney back & forward with both hands.

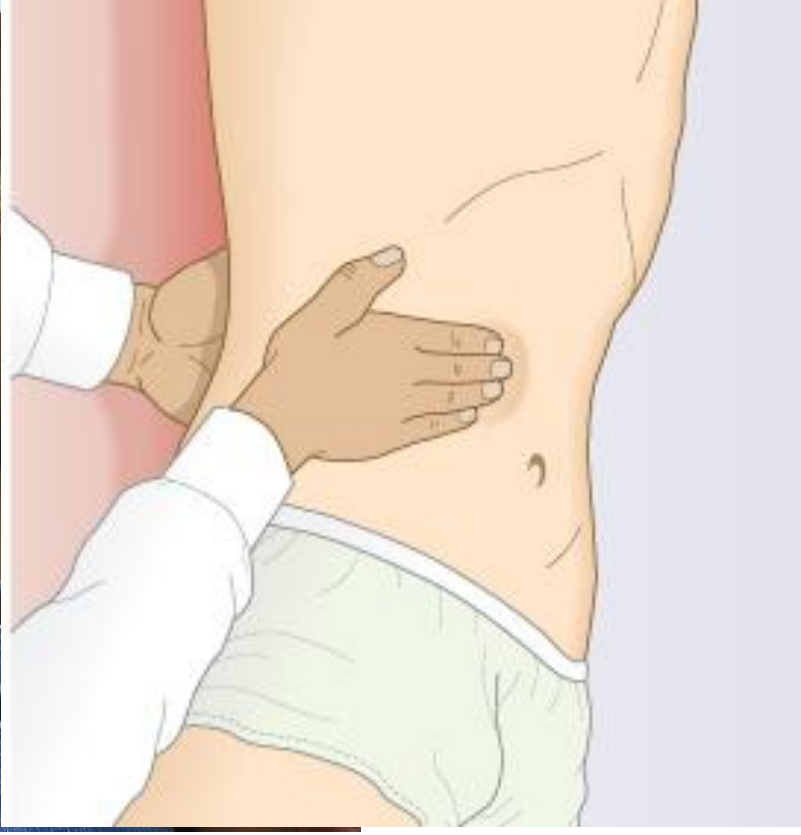
Left kidney
Same as right kidney





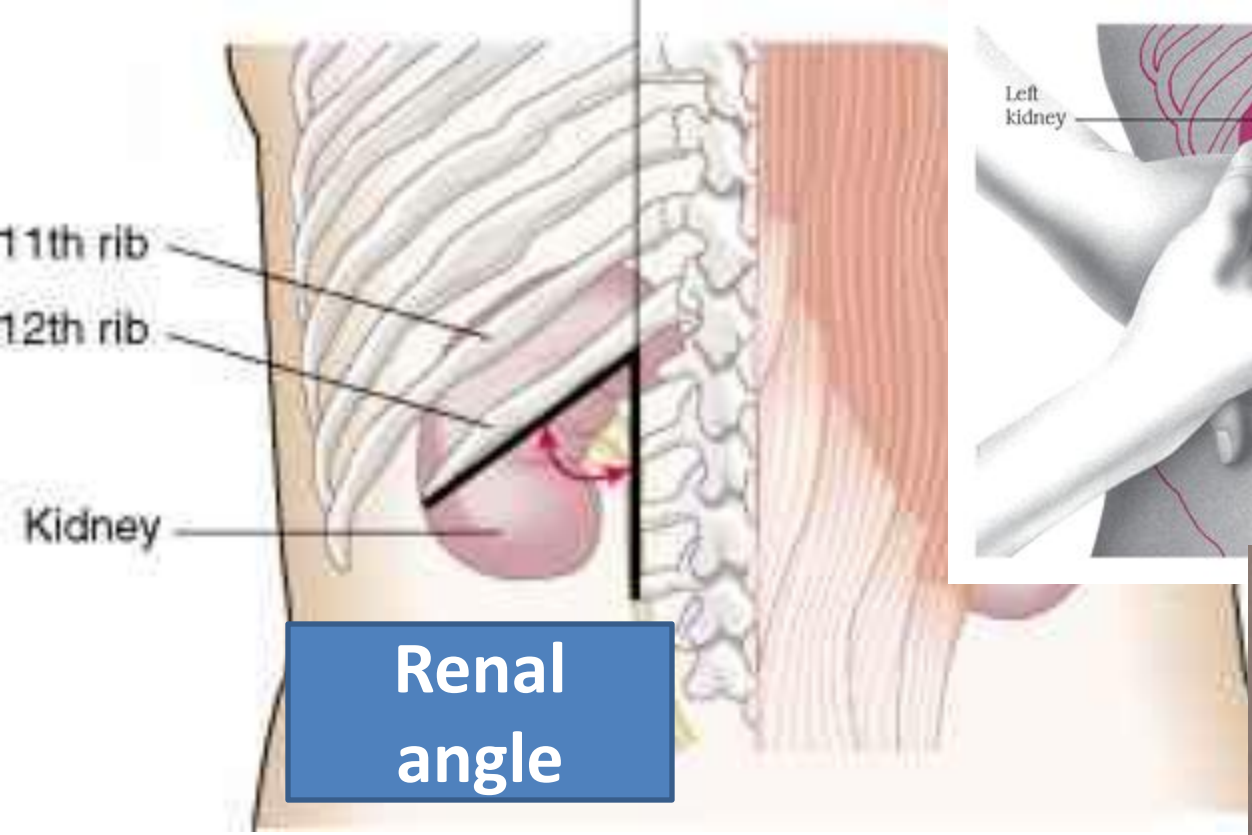
Bimanual ballottement

Right kidney



Right kidney

Left kidney



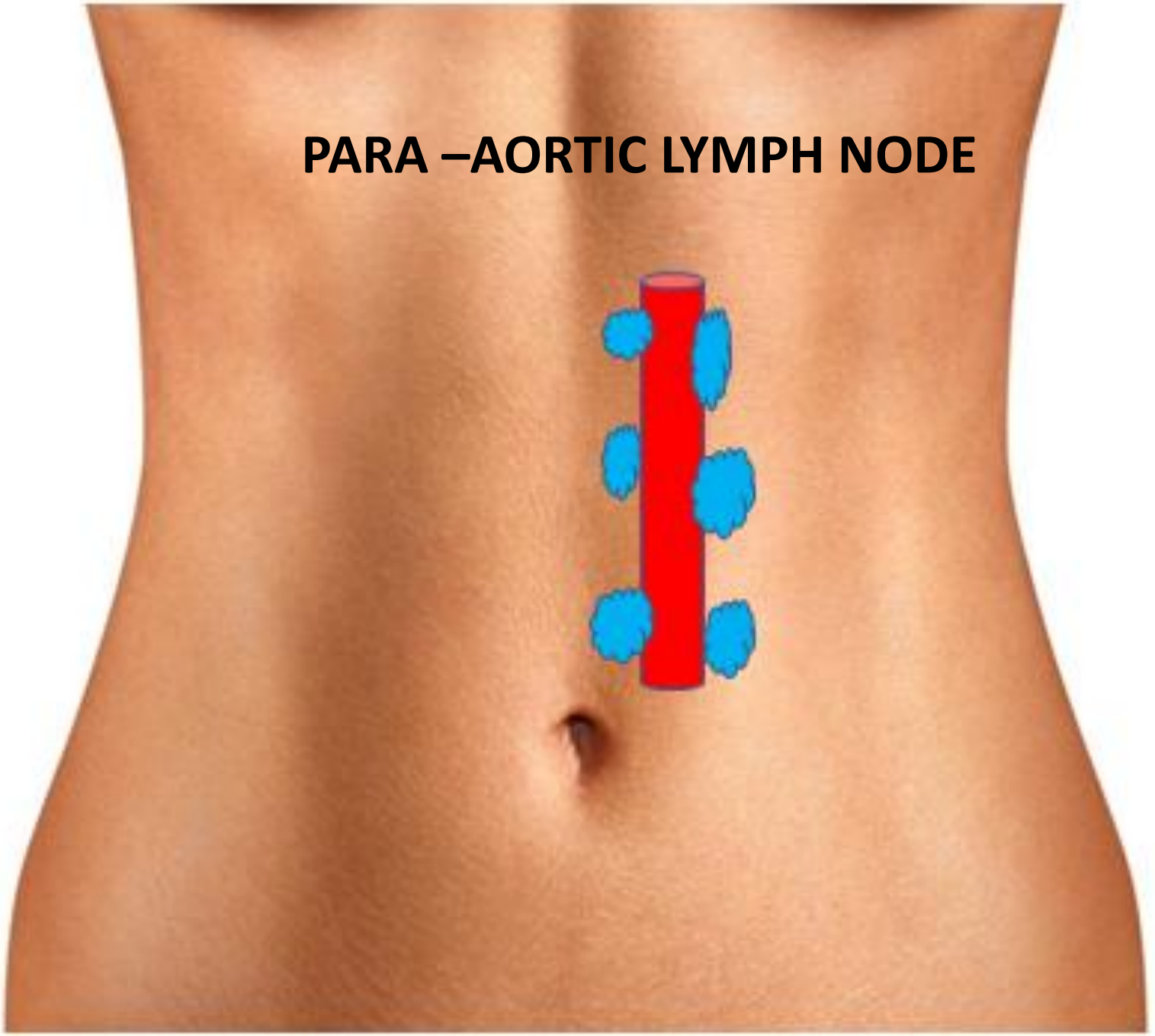
Renal angle

Normal= non-tender

Tenderness occurs in acute infection (pylonephritis)

How to see renal angle tenderness

PARA –AORTIC LYMPH NODE



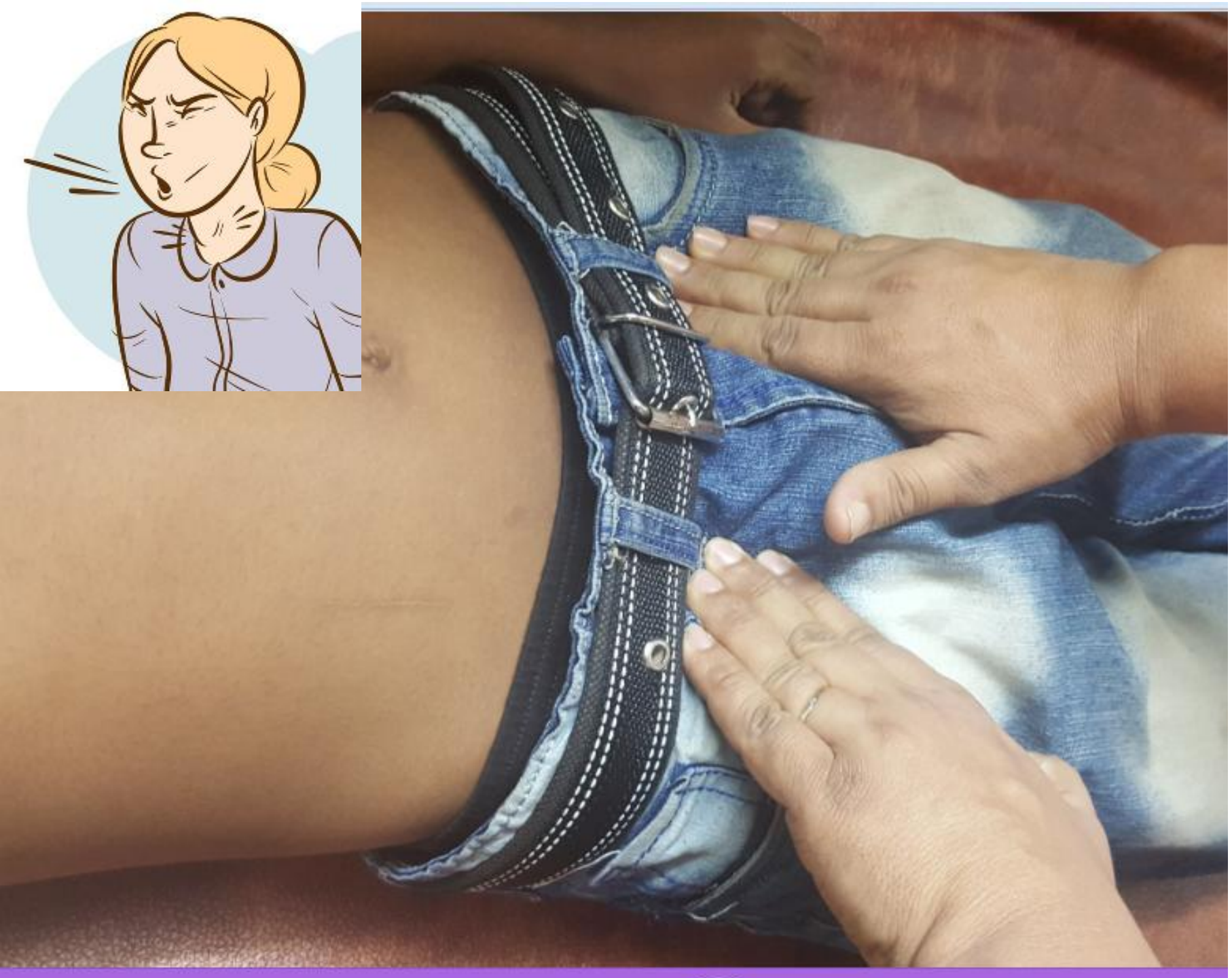
See **Para—aortic lymph node;**

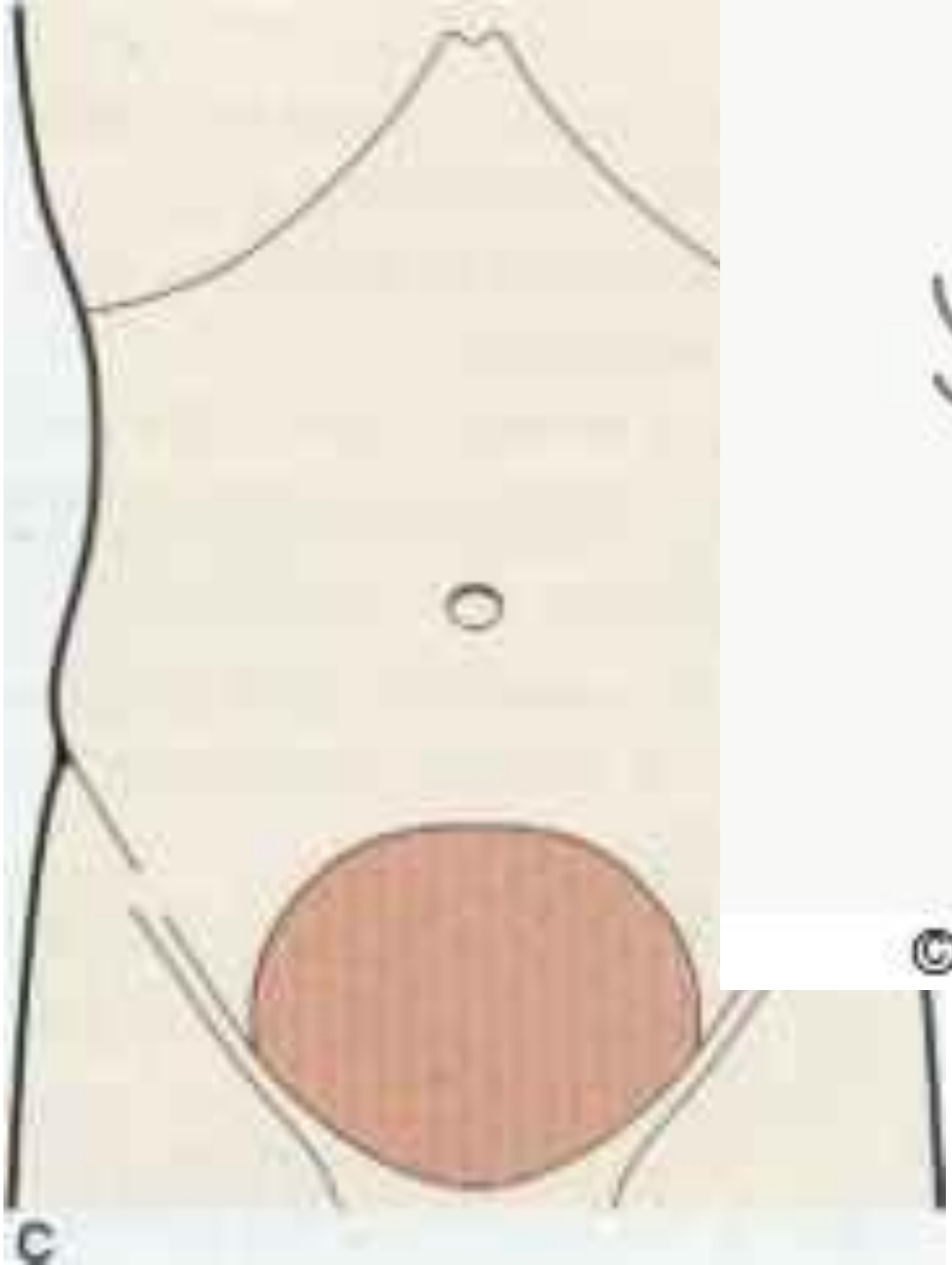
Step one. Place tips of both fingers vertically first left side of the midline and in between epigastric and umbilicus and moves all finger like u r massaging manner

HERNIAL ORIFICE

Inguinal hernia

Femoral hernia





PALPABLE
UNIRARY
BLADDER

Now palpate the urinary bladder:

Step 1. Start from the epigastrium

Step 2. Place your both hand in semiprone position and touch tip of finger together like reverse U Shape

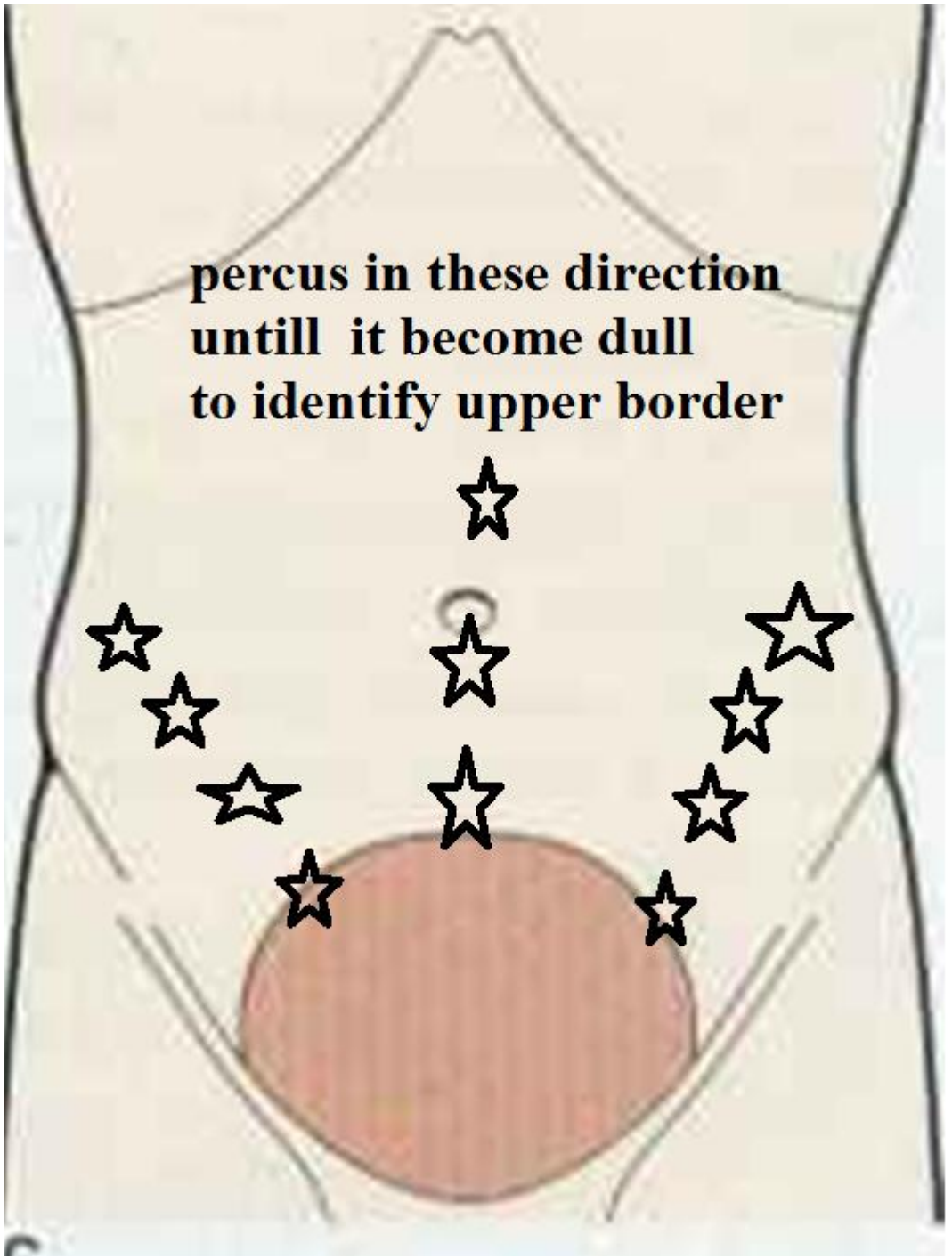
Step 3. Now downward until u palpate or come contact with the upper border of urinary bladder .

Step .4 . when u get the upper border of urinary bladder then percussion from three direction until dullness appear

One line ---along the mid line from epigastric

Second line along the oblique line from right upper quadrant and

Another oblique line is from left upper quadrant


percus in these direction
untill it become dull
to identify upper border

PALPATE THE TESTES

Take again consent from patient that you r going to exam his private part

Like testes

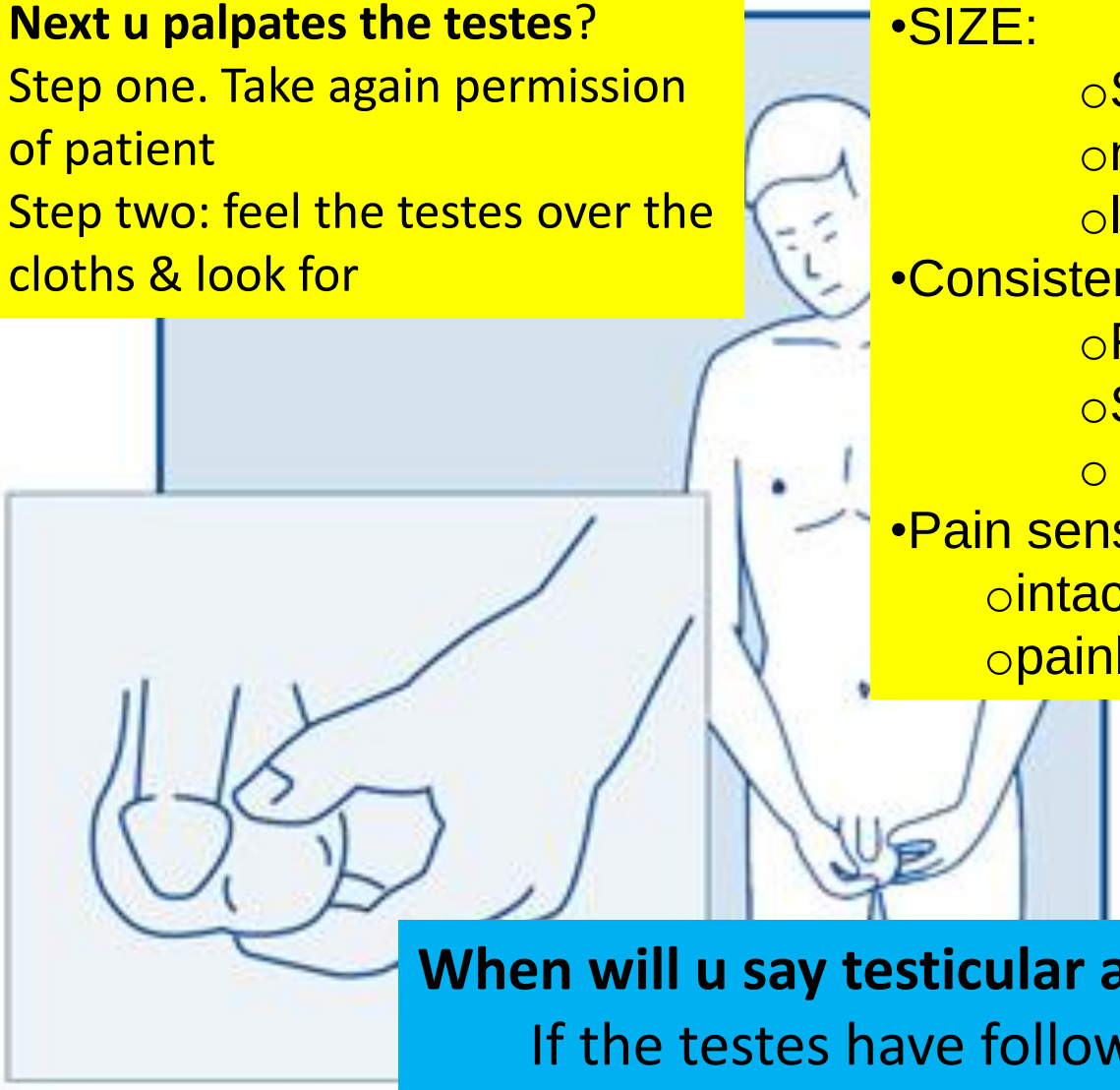
Ask for screen

We usually palpate above clothes

Next u palpates the testes?

Step one. Take again permission of patient

Step two: feel the testes over the cloths & look for



- SIZE:
  - Small or ---atrophy
  - normal or
  - large –large orchitis or tumor
- Consistency :
  - Firm –Normal
  - Soft –Testicular atrophy
  - Hard—tumor
- Pain sensation :
  - intact –painful in during gentle press
  - painless –no pain during gentle press

When will u say testicular atrophy?

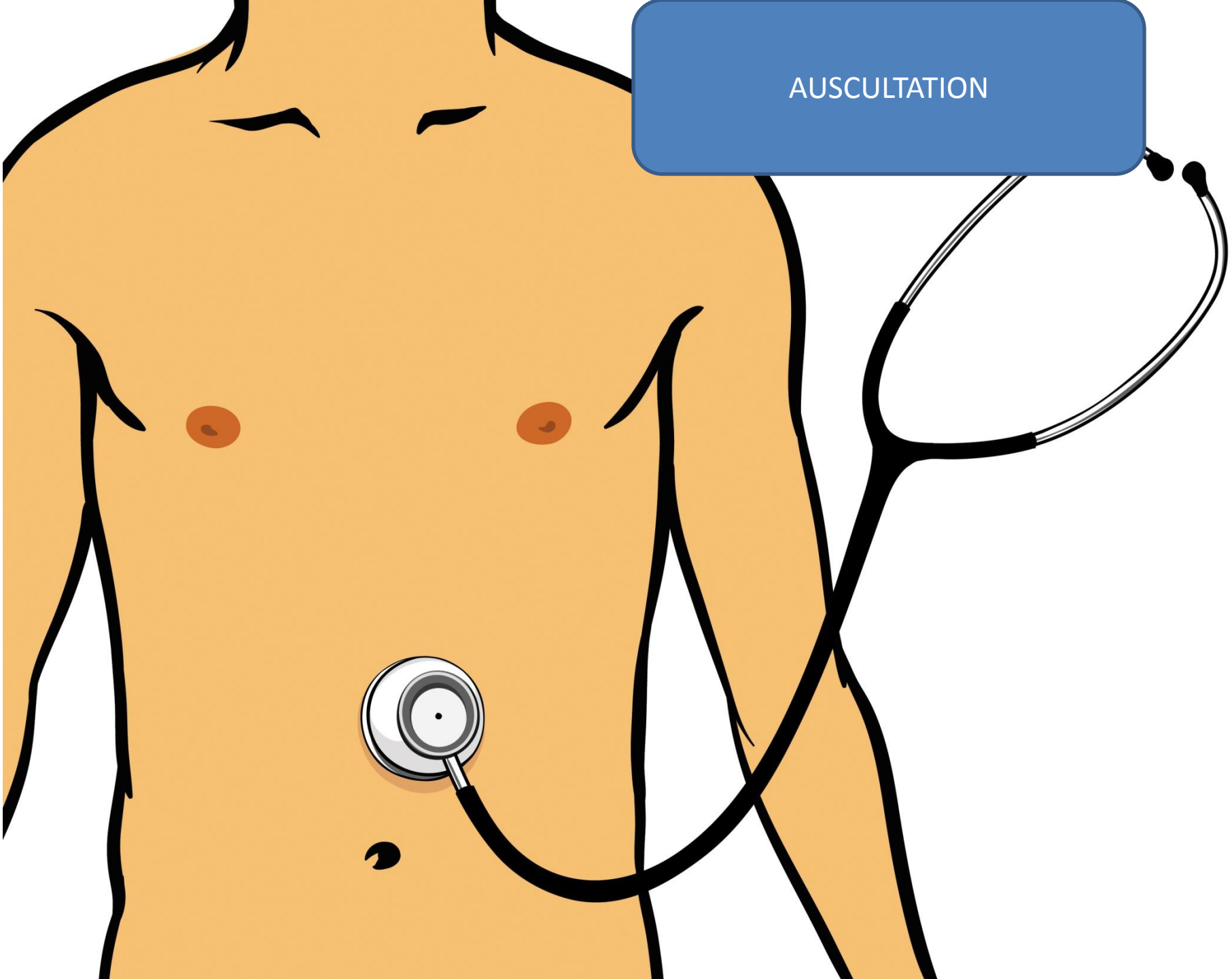
If the testes have following three criteria then u may call testicular atrophy :

Soft

Small

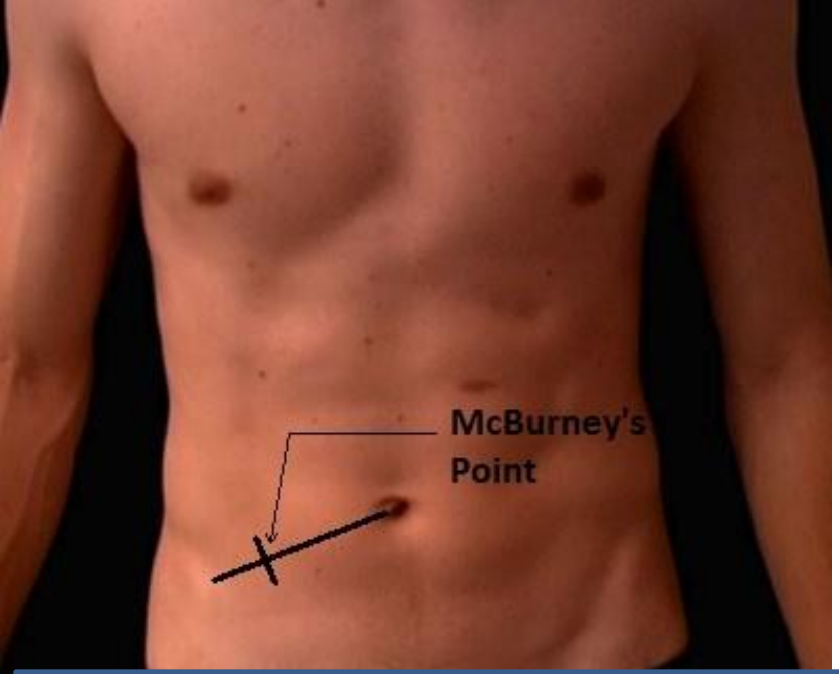
Pain less

AUSCULTATION



What we see in auscultation

- **Bowel sound**
- **Renal bruit**
- **Hepatic bruit if liver palpable**
- **Splenic rub**
- **Venus hum**



Bowel sound :

Usually listen right side of umbilicus
(just above macberneys point)

Interpretation

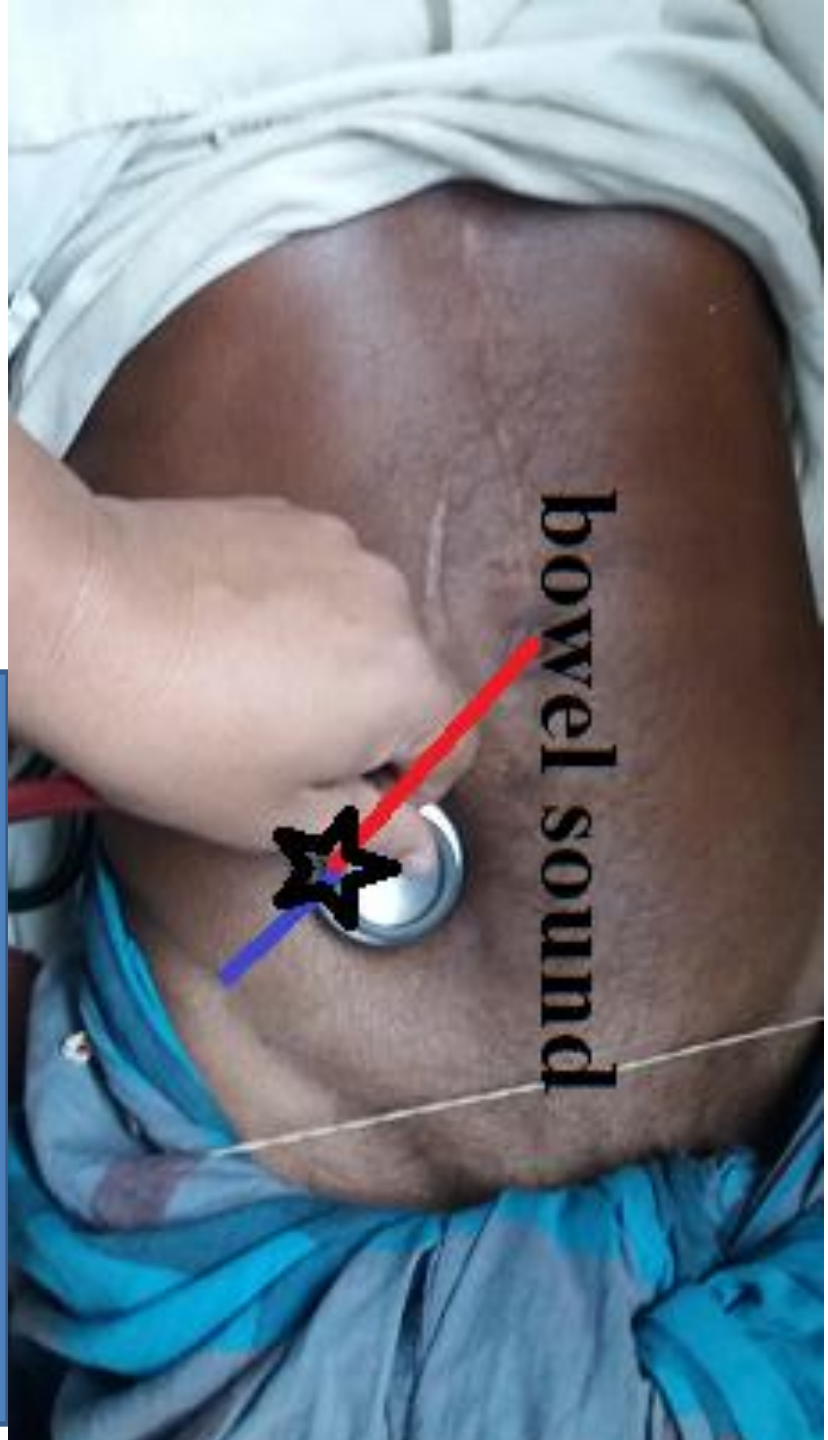
Bowel sound: present --

Bowel sound: absent
(before telling absent bowel u have to listen for 3 mins)

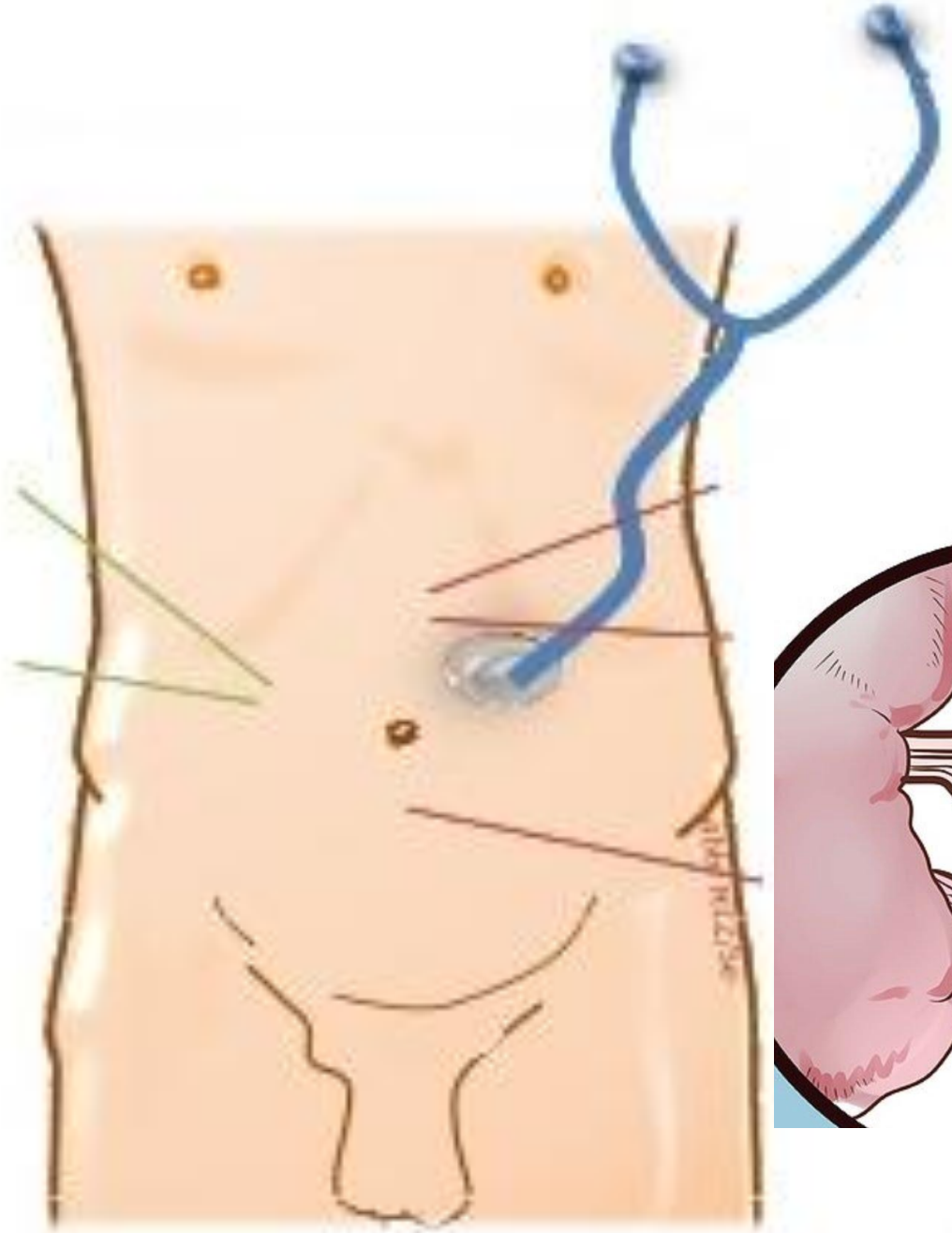
Cause of bowel sound absent is

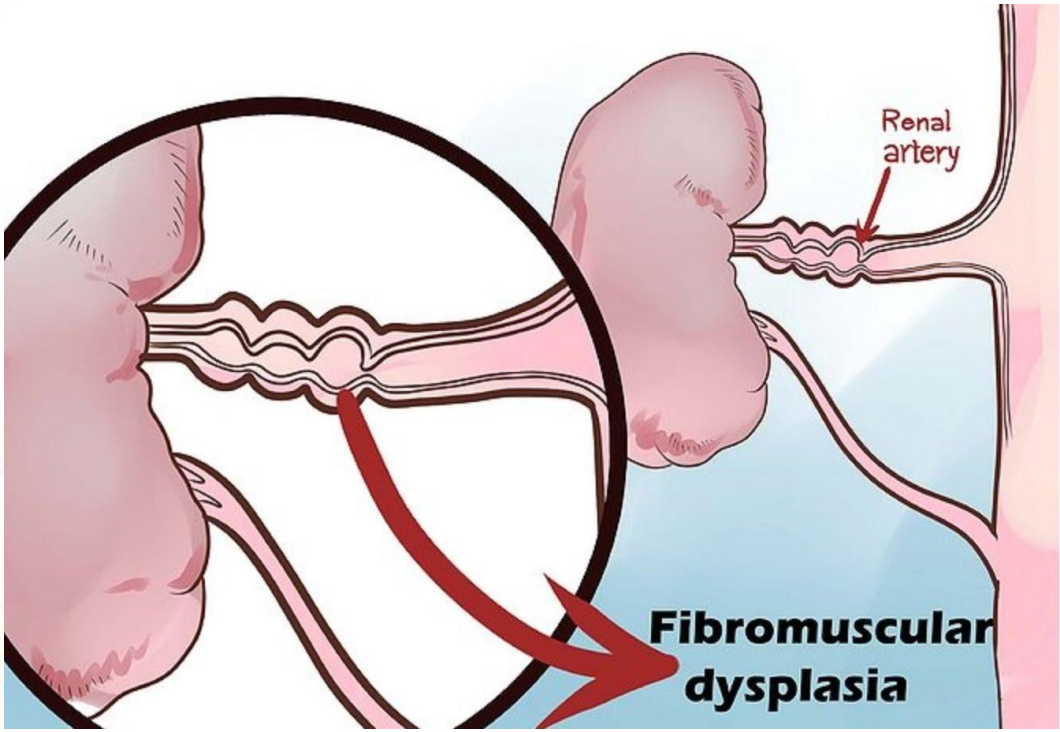
Paralytic ileus

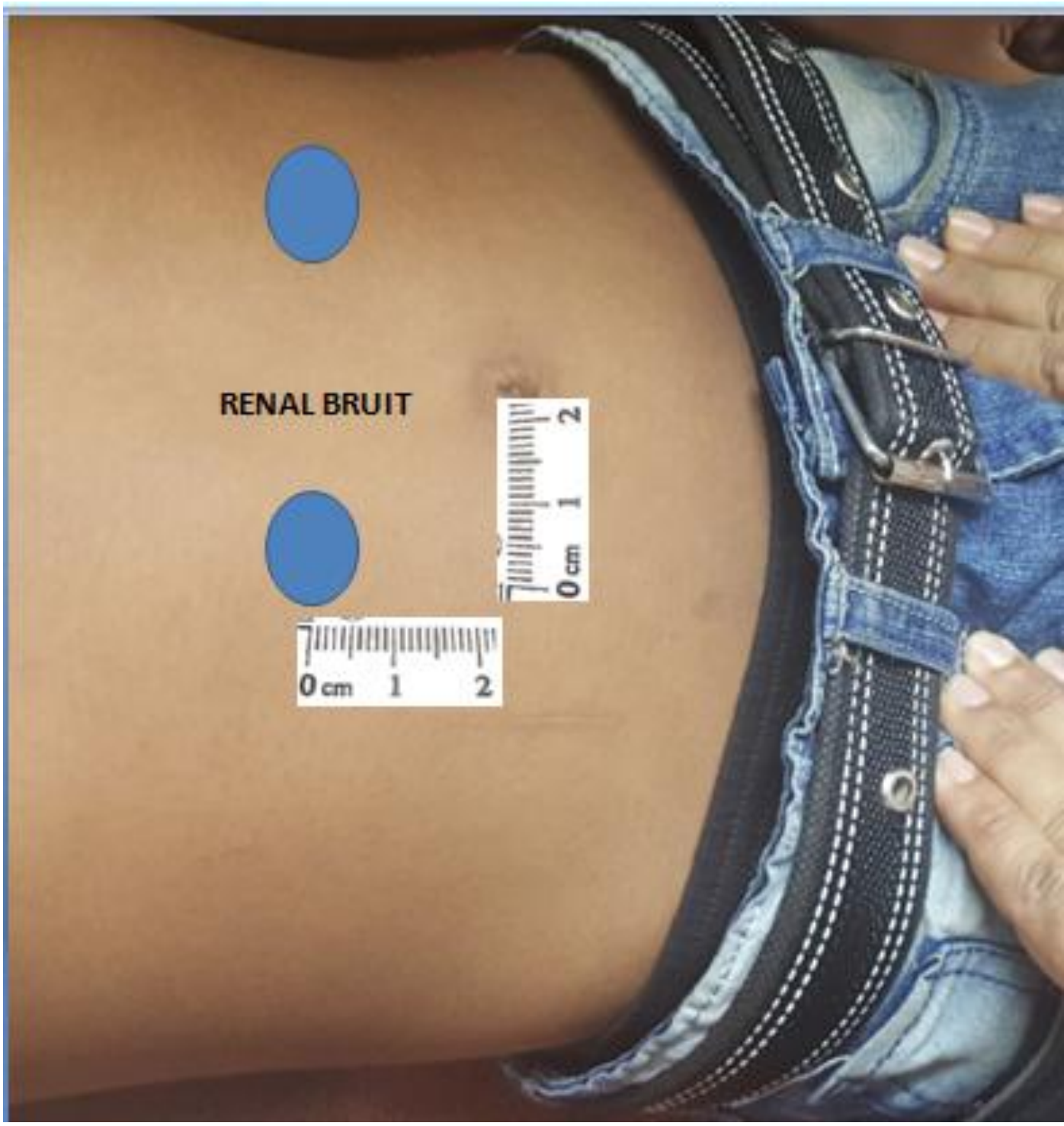
Peritonitis



RENAL BRUIT





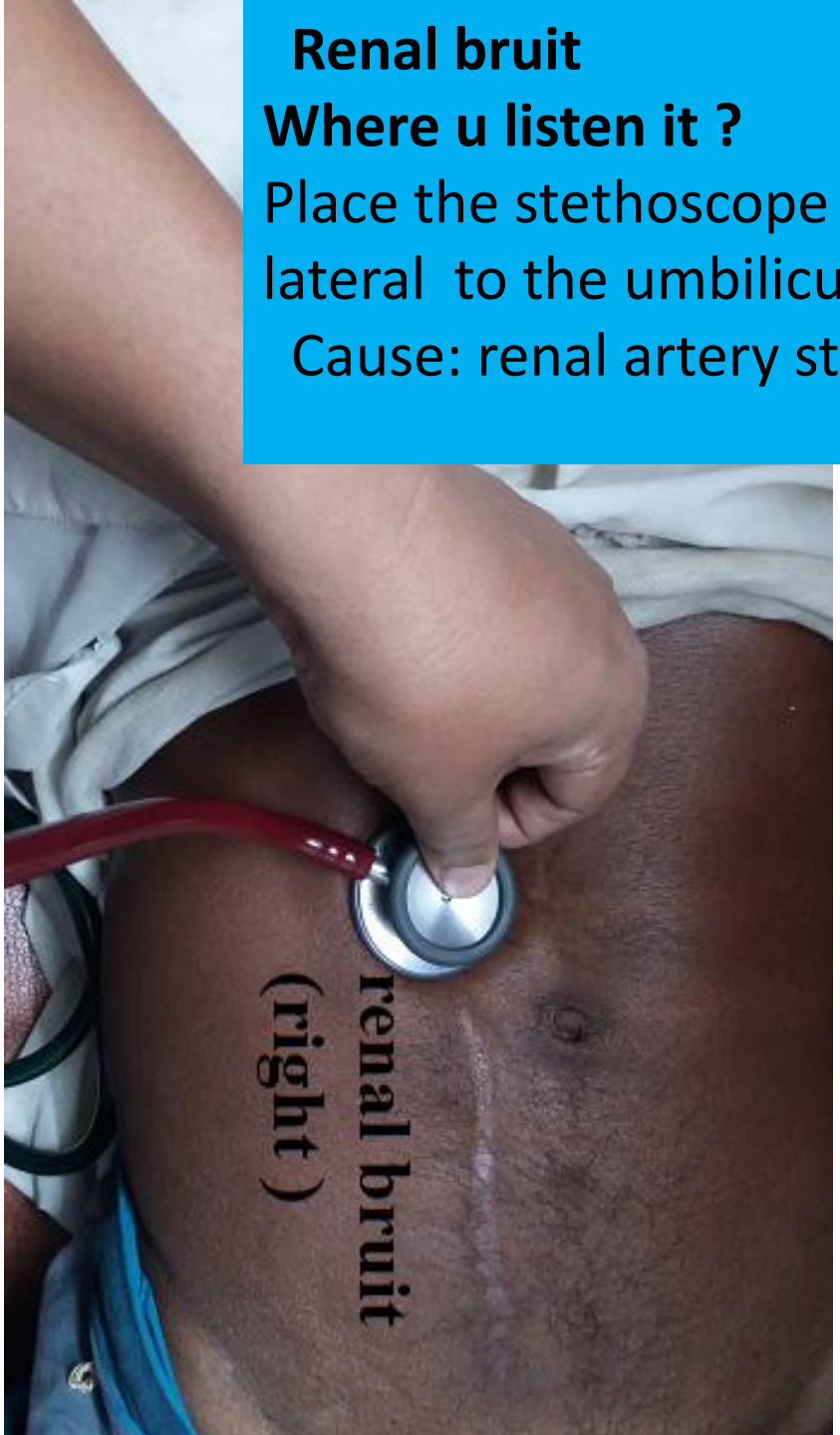

RENAL BRUIT
0 cm 1 2
0 cm 1 2

Renal bruit

Where u listen it ?

Place the stethoscope 2- 3 cm above and lateral to the umbilicus

Cause: renal artery stenosis



Venous hum

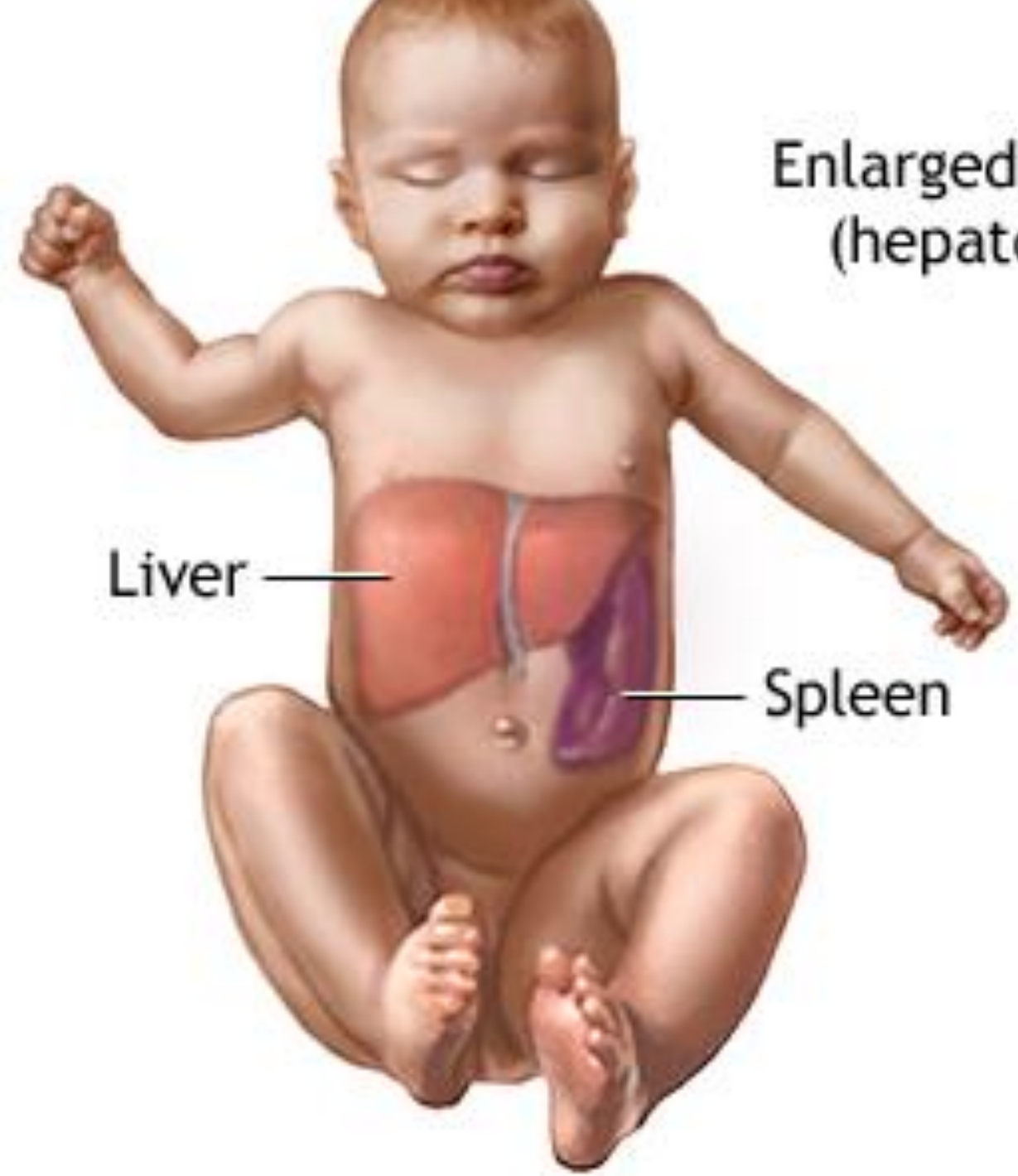
Listen in between xephoid process and umbilicus

PUDDLE SIGN
For minimum ascites

PUDDLE SIGN METHOD OF EXAMINATION PATIENT IS PRONE FOR 3-5 MINUTES AND THEN RISES TO ALL FOURS DIAPHRAGM OF THE STETHOSCOPE IS PLACED OVER MOST DEPENDENT AREA OF THE ABDOMEN BEGIN BY FLICKING A FINGER OVER A LOCALIZED FLANK AREA MOVE THE STETHOSCOPE OVER THE OPPOSITE FLANK SUDDEN INCREASE IN INTENSITY IS A POSITIVE SIGN (NO LONGER USED)

Causology

Common

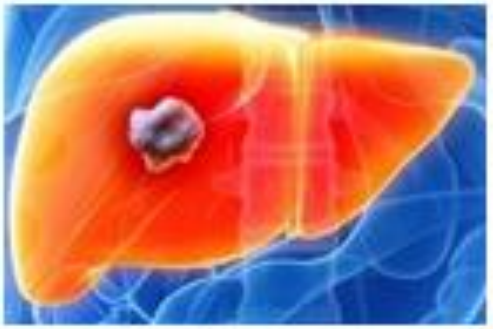


COMMON CAUSES

Tender hepatomegaly	**Non tender hepatomegaly**
○ Viral hepatitis ○ Liver abscess ○ HCC ○ Congestive cardiac failure ○ budd-chiari syndrome	○ Secondary in the liver ○ Kala-azar ○ Malaria ○ Lymphoma ○ Leukemia ○ Myelofibrosis ○ Polycythemia
Splenomegaly	○ **Hepato-splenomegaly**
○ KamaL-3 my Thal ○ Ka-Kala-azar ○ Ma-Malaria ○ L—chronic liver disease with portal HTN ○ L—lymphoma ○ L—luekemia (CML) ○ MY—Mylofibrosis ○ Tha—Thalassaemia	○ KamaL-3 my Thal ○ Ka-Kala-azar ○ Ma-Malaria ○ L—chronic liver disease with portal HTN ○ L—lymphoma ○ L—luekemia (CML) ○ MY—Mylofibrosis ○ Tha—Thalassaemia

Acute Viral hepatitis

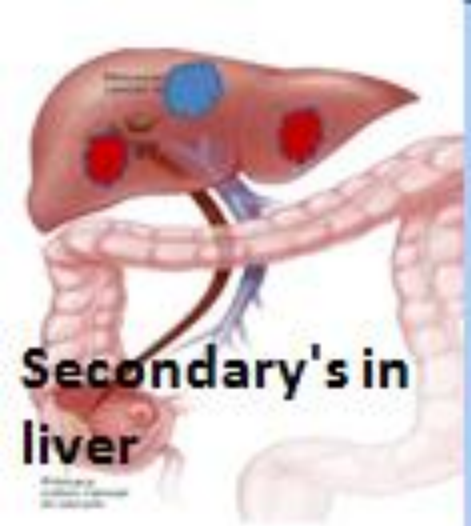
Liver abscess



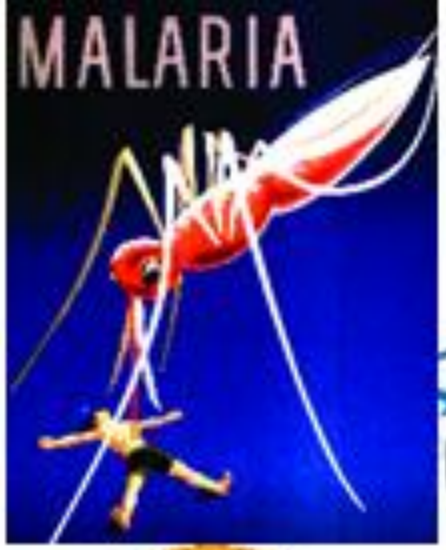
HCC

CCF

budd-chiari syndrome



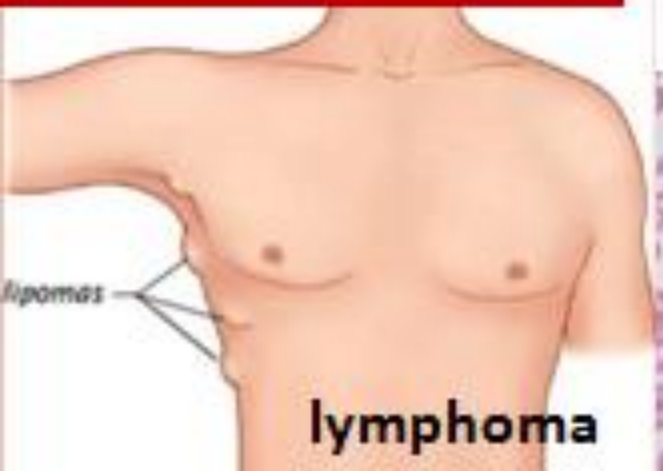
Secondary's in liver

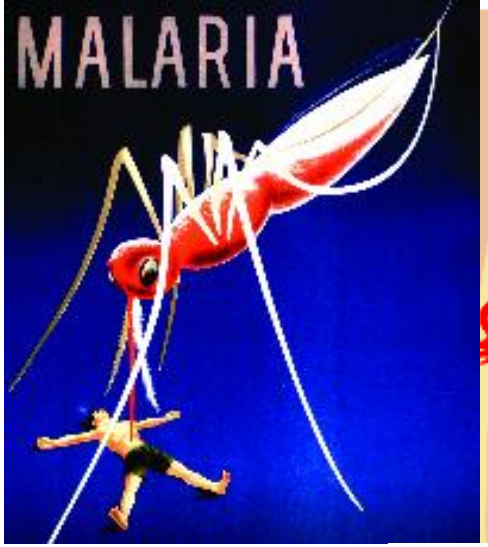


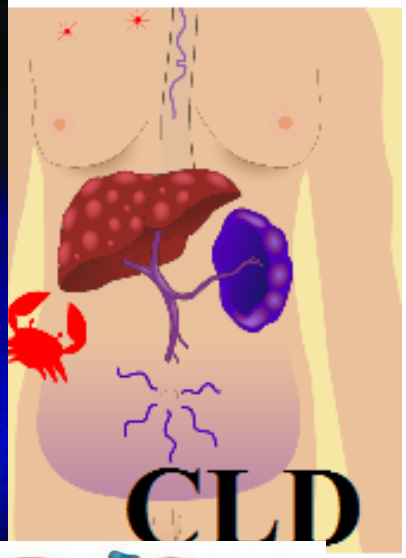
Cystic disease of liver

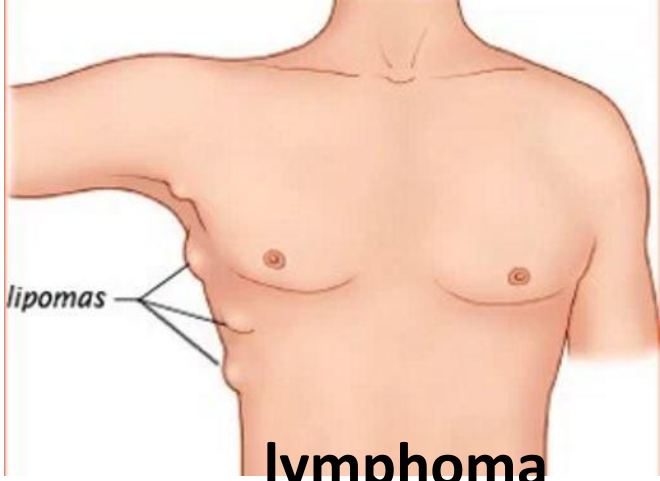
Non tender hepatomegaly

Fatty liver

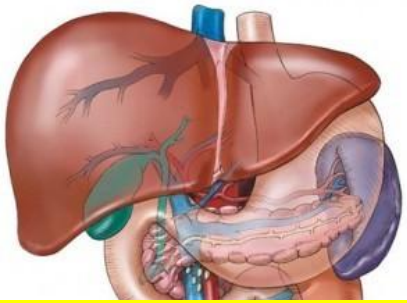




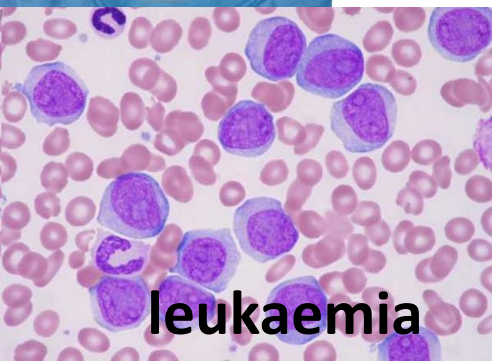


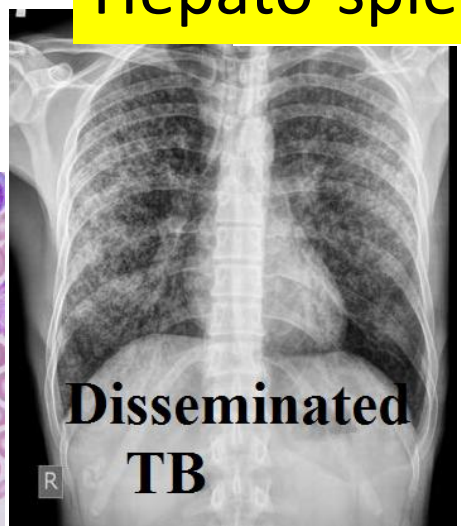


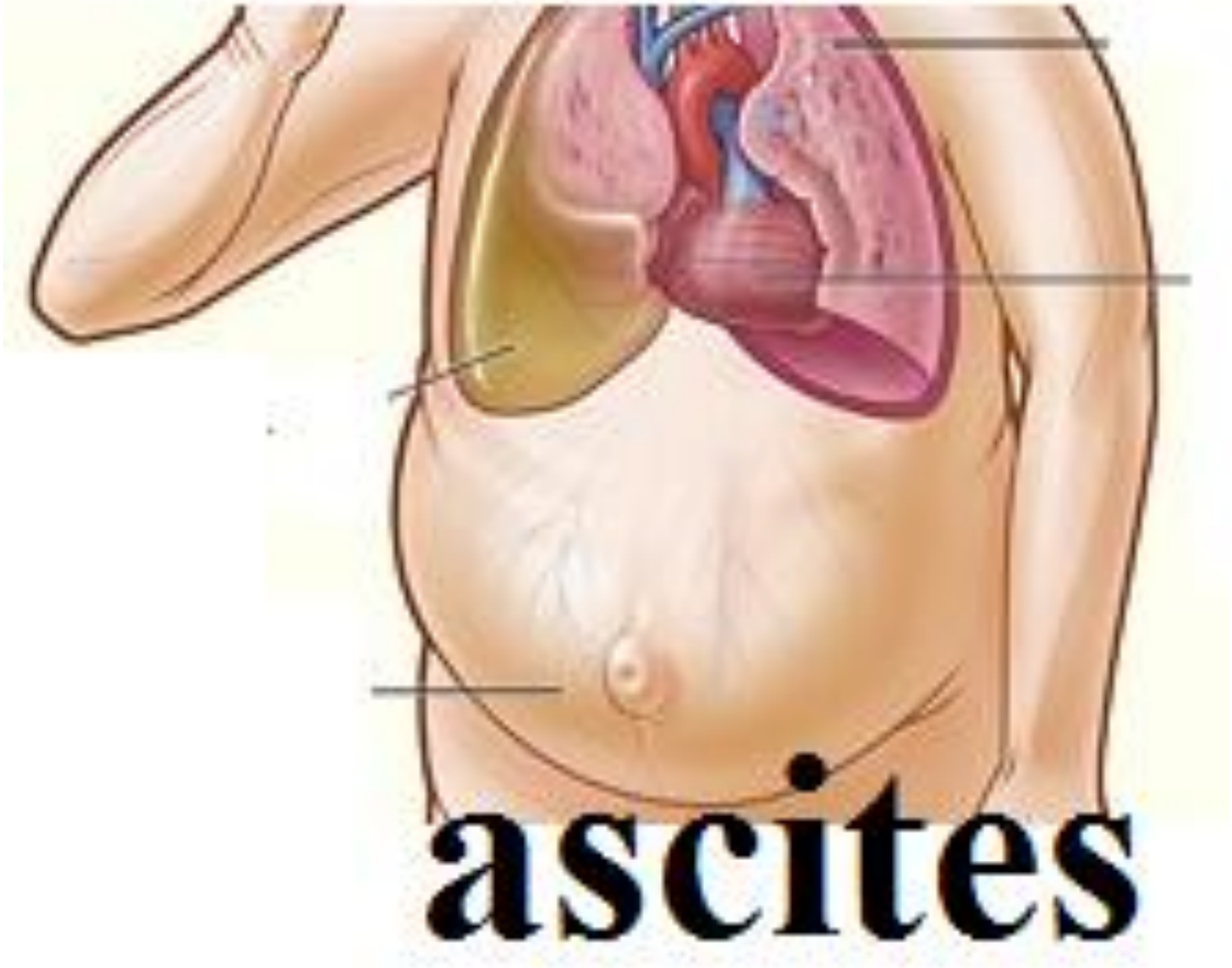
lymphoma



Hepato-splenomegaly



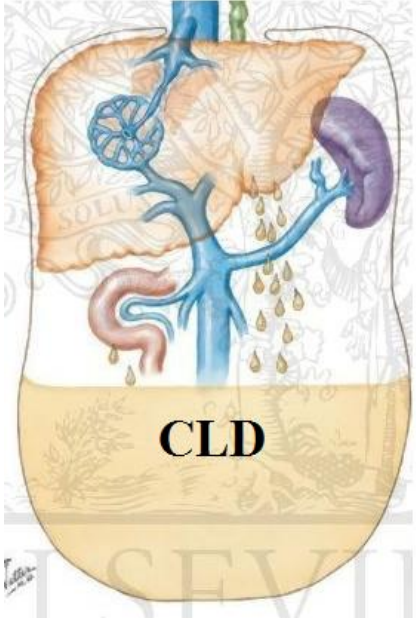



ascites

common Causes of ascites
1. abdominal tuberculosis 2. cirrhosis of liver 3. intra-abdominal malignancy with peritoneal seedlings 4. congestive cardiac failure 5. lymphoma 6. nephrotic syndrome

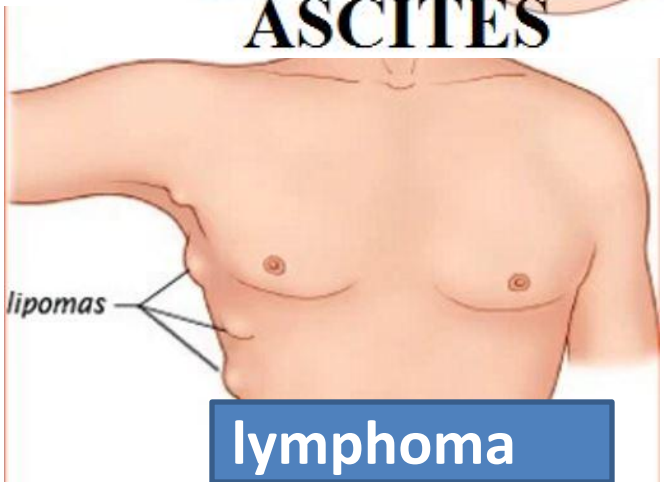
ascites	
Exsudative	**transudative**
i**nfection** Tuberculosis Pancreatitis SBP (spontaneous bacterial peritonitis) **malignancy** intra-abdominal malignancy with peritoneal seedlings **Blood** lymphoma lukaemia Lymphatic obstruction **connective tissue** Rheumatoid arthritis Systemic lupus erythematosus (SLE) Adult still disease **Budd chairi syndrome**	**common causes :** to remember 4 system heart , liver, kidney , GIT 1. Heart--CCF 2. Liver--cirrhosis of liver 3. Kidney --nephrotic syndrome / CKD 4. GIT--malabsorption / malnutrition / protein losing enteropathy **uncommon causes :** **CMH** **C—**constrictive pericarditis **M—**Meigs syndrome --ovarian tumor + rt sided PL. effusion **H—**Hypothyroidism / Myxoedema

Abdominal TB

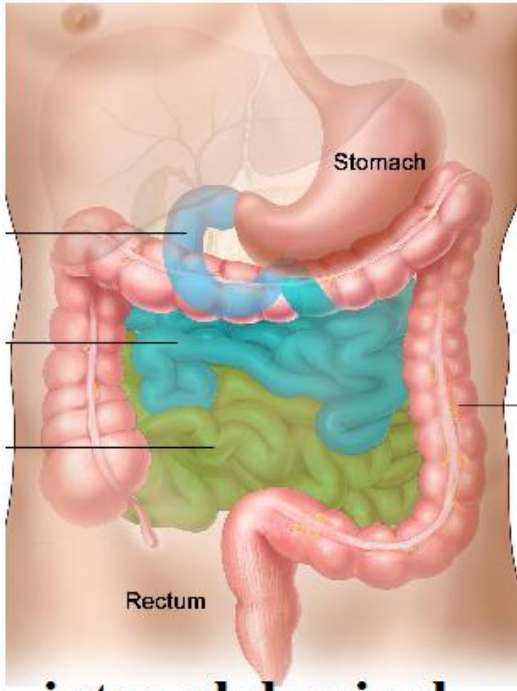


NEPHROTIC SYNDROME

CAUSE OF ASCITES



lymphoma



intra abdominal malignancy

Causology detailed

causes of hepatomegaly	
liver disease 1. acute viral hepatitis 2. liver abscess **3. CLD/ cirrhosis** a. Alcoholic liver disease b. haemochromatosis 4. Autoimmune hepatitis 5. Primary biliary cirrhosis 6. Non alcoholic fatty liver disease	**Haematological disorders** 1. Lymphoma 2. Leukaemia 3. Myelofibrosis 4. Polycythaemia
Right heart failure / CCF	**hepatic out flow obstruction** 1. Budd–Chiari syndrome
malignancy / cyst 1. Primary hepatocellular carcinoma 2. Secondary metastases 3. Multiple or large hepatic cysts	**infiltrative disease** 1. Amyloidosis 2. Sarcoidosis 3. Glycogen storage disorders

tender heaptomegaly	non-tender
1. CCF 2. acute vilral haptitis 3. liver absecess 4. primary hepatocellular carcinoma 5. budd-chiari syndrome	1. secondaries in the liver 2. cystic disease of liver 3. fatty liver 4. infiltrative disease a. Amyloidosis b. Sarcoidosis 5. Glycogen storage disorders 6. cirrhosis due to ALCOHOLIC / haemochromatosis

most common causes of splenomegaly

To remember In CBMC

IN ---Infective causes

Bacterial

- infective Endocarditis
- Tuberculosis
- Salmonella

Viral

- Epstein–Barr
- Cytomegalovirus

Protozoa

- **Malaria***
- **kala-azar**

Fungal

- Histoplasmosis

C---Congestive

Portal hypertension

1. **Cirrhosis of liver or chronic liver disease with portal hypertension**
2. **non cirrhoric Portal hypertension**
   a. Hepatic vein occlusion
   b. Portal vein thrombosis

B--Blood

Red cell disorders

- haemolytic anemia
- ✓ Autoimmune haemolytic anaemias
- ✓ Haemoglobinopathies (thalassamia)

Myeloproliferative disorders

- Chronic myeloid leukaemia*
- Myelofibrosis*
- Polycythaemia rubra vera

lymphoproliferative disorders

- Leukaemias CLL
- Lymphomas

M--miscellaneous (infiltrative / storage)

Sarcoidosis
Amyloidosis
Glycogen storage disorders

C--connective tissue

- Felty's syndrome in rheumatoid arthritis
- Systemic lupus erythematosus

huge splenomegaly	**just palpable spleen**
common causes infective ➢ chronic malaria ➢ kalaazar ➢ tropical splenomegaly syndrome blood ➢ myelofibrosis ➢ CML ➢ hemolytic anaemia (thalassamia) ➢ hairy cell leukaemia ➢ promyelocytic leukaemia **uncommon causes** ➢ PRV ➢ CLL ➢ rarely lymphoma (not told in exam)	infective ➢ enteric fever ➢ SBE ➢ Malaria ➢ disseminated TB connective tissue ➢ SLE ➢ felty syndrome **blood** ➢ lymphoma ➢ leukaemia congestive ➢ CLD with portal hypertension
Fever with splenomegaly Kala-azar Malaria Enteric fever SBE Lymphoma leukaemia Dessiminated TB	

<table>
<tr><td colspan="3">causes of Hepatosplenomegaly</td></tr>
<tr><td colspan="3">To remember In CBMC</td></tr>
<tr><td colspan="2">IN ---Infective causes</td><td>C---Congestive</td></tr>
<tr><td>Bacterial
disseminated TB</td><td>Viral
HIV
Epstein–Barr
Cytomegalovirus</td><td rowspan="2">CLD with Portal hypertension
(only in alcoholic cirrhosis and haemochromatosis
and hepatoma on TOP of CLD)</td></tr>
<tr><td>Protozoa
Malaria*
Leishmaniasis (kala-azar)*
toxoplasma</td><td>Fungal
Histoplasmosis</td></tr>
<tr><td colspan="2">B--Blood</td><td>M--miscellaneous (infiltrative / storage)</td></tr>
<tr><td colspan="2" rowspan="2">Red cell disorders
haemolytic anemia
Autoimmune haemolytic anaemias
Hereditary spherocytosis
Haemoglobinopathies --thalassamia
Myeloproliferative disorders
Chronic myeloid leukaemia*
Myelofibrosis*
Polycythaemia rubra vera
lymphoproliferative disorders
Leukaemias CLL
Lymphomas
myelodyplastic syndrome</td><td>Sarcoidosis
Amyloidosis
Glycogen storage disorders</td></tr>
<tr><td>C--connective tissue</td></tr>
<tr><td colspan="2"></td><td>Felty’s syndrome in rheumatoid arthritis
Systemic lupus erythematosus
adult still disease</td></tr>
</table>

A patient with hepatomegaly with ascitis

CCF

Hepatoma with secondary in the peritoneum

Lymphoma

Dessiminated TB

Chirrohsis of liver with portal HTN

Fever with ascites

- ❖Abdominal TB
- ❖Lymphoma
- ❖leukaemia

Fever with splenomegaly

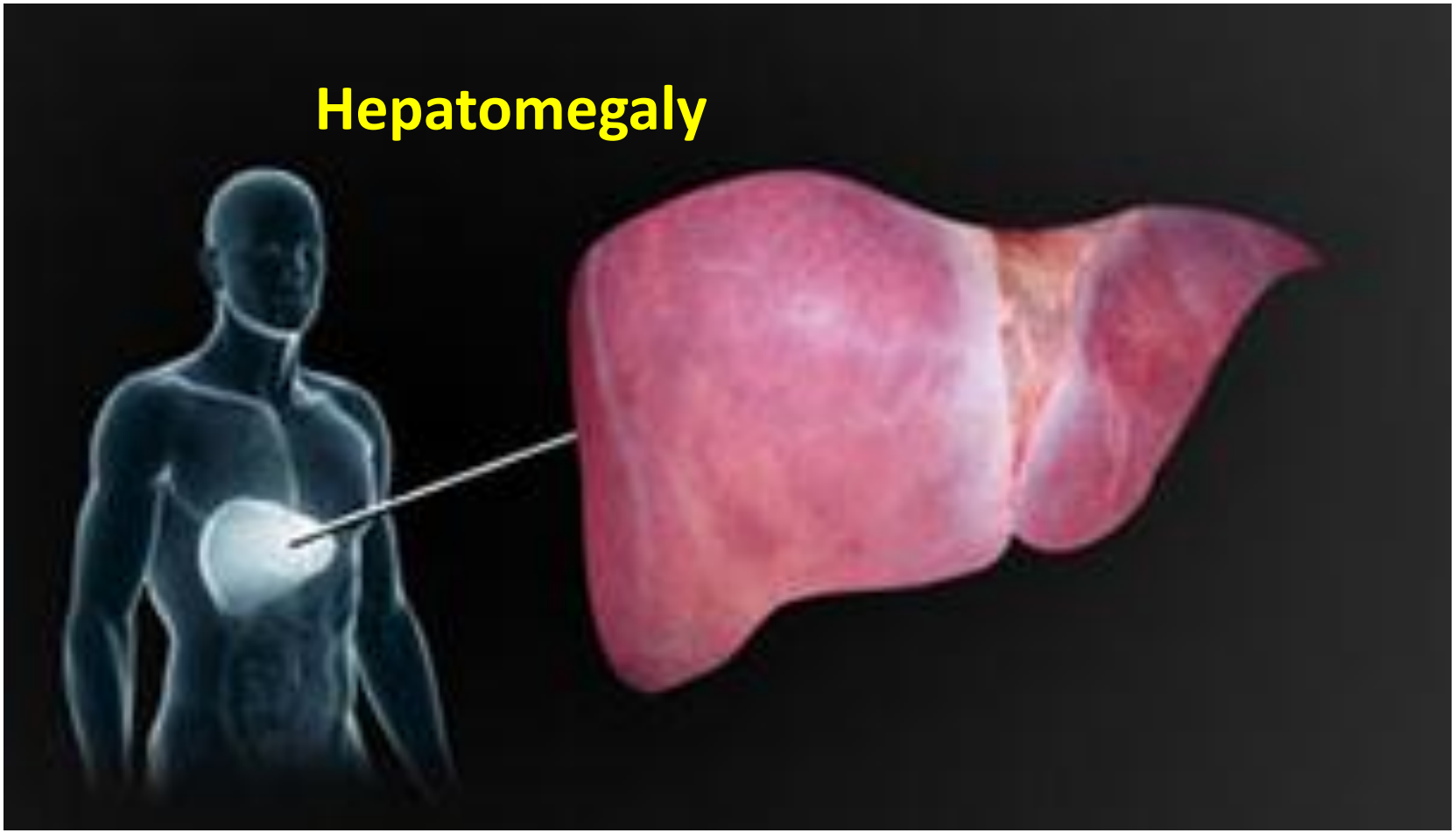
Kala-azar

- ○Malaria
- ○Enteric fever
- ○SBE
- ○Lymphoma
- ○leukaemia
- ○Dessiminated TB

A patient with splenomegaly with ascits

- ❖CLD
- ❖Lymphoma
- ❖leukaemia
- ❖Dessiminated TB

SOME SHORT CASE



HEPATOMEGALY

A patient with **hepatomegaly** only (secondary in liver) may give u in short case
The Question will be palpate liver and tell ur finding?

Q. Palpate the liver in appropriate procedure
Q.describe ur finding in following way

Palpation of the abdomen of this middle cachetic person reveals the liver is enlarge(say palpable if span > 13cm) which is 7cm from right costal margin at mid clavicular line and 5 cm from Xephoid process non tender , having irregular surface , firm to hard or hard in consistency , sharp margin ,upper border of liver dullness is in 5^{th} intercostals space , liver span is 15 cm and no hepatic bruit .

examiner may ask u Pl palpate the abdomen?
Then u have to do all step of palpation
Then describe it as follow

In superficial and deep palpation of abdomen of this middle age cachetic patient reveal that the patient temperature of abdomen is normal, no tenderness, hyperesthesia, rigidity.

Organ palpation reveals that the liver is enlarge(say palpable if span > 13cm) which is 7cm from right costal margin at mid clavicular line and 5 cm from Xephoid process non tender , having irregular surface , firm to hard or hard in consistency , sharp margin ,upper border of liver dullness is in 5th intercostals space , liver span is 15 cm and no hepatic bruit .

Spleen and kidneys are not palpable, no fluid thrill and testis is normal in size and consistency

If the examiner only tells u palpate the liver then

- Only palpate the liver and tell the finding
- If he want to know the Dx then ask sir that u want to see relevant like –palpate the spleen and sifting dullness ,testicular atrophy plus that others mention in left sided box

I want see in general examination

- Anemia –lymphoma, leukemia , kala-azar
- Jaundice --viral hepatitis
- Temperature –infective cause –kala-azar , lymphoma,leukaemia ,liver abscess
- Lymph node
- Boney tender ness
- JVP

Stigmata of CLD

- Jaundice –CLD
- Hepatic faces
- Spider naevi
- Gynaecomascia
- Oedema
- Palmer erythema
- Leukonychia

If tender than

- **Viral hepatitis**
- **CCF**
- **Liver abscess**
- **Primary hepato cellular carcinoma**

If non tender

- First DD will be
  - ❖secondaries in the liver
- Next will b
  - ❖Cystic disease of liver

- Storage disease
- Other cause of hepatosplenomegly

  Not tell if u have not find spleen

  - Lymphoma
  - Leukemia
  - Early stage of CLD

Suppose it is a case secondary's in the liver

What is ur diagnosis?
My diagnosis is secondary metastasis in the liver
Why
Because liver is hard, non tender and irregular surface having multiple nodules
Why not primary?
In Primary hepatocellular carcinoma liver is tender and single nodule. In primary HCC carcinoma is usually associated with CLD. That's why if it is primary HCC then we will get splenomegaly and other stigmata of CLD which are absent in this patient
Why this is not a case of CCF
In CCF the liver is soft with raised JVP & tender hepatomegly and depend edema With or without Left parasternal heave and P2 and function TR
It may be lymphoma or leukemia?
If it is lymphoma or leukemia then it is usually associated with splenomegaly and fever In case of lymphoma other lymphoadenopathy usually present. In case of leukemia pt is usually toxic and boney tenderness present
What it is not a kala –azar or malaria?
In kala-azar sole hepatomegaly is unlikely and it is usually associated with splenomegaly and spleen is enlarge before the liver palpable

Clinically how will u differentiate between HCC @ 2nd in liver?	
In primary HCC	it is tender , bruit may present
	Primary case sign of hepatic insufficiency present such as ascites, splenomegaly , spider , jaundice Palmer erythema , leuconychia , gynaecomastia testicular atrophy
	Patient is more toxic in primary case
Secondary	only hepatomegaly which hard and non tender ,
	No feature of hepatic insufficiency
What may the primary site?	
To remember PUBLIC-T **C**-Colon**, I-**intestine-- gastric, **P**--prostate and pancreas, **B**--breast and **T**--thyroid , **L**--Lung , **U** –uterus	

How will u differentiate from primary HCC from 2nd HCC ?		
	HCC	**2nd in the liver**
Tenderness	Tender hepatomegaly	Non tender hepatomegaly
Number	Single lesion	Multiple lesion
Umbilication	Present	Absent
Bruit	Present	Absent
Bio chemical marker	Alpha feto protein (60%)	CEA +

What investigation you want?	
To see the liver status	Liver function test –SGPT, S. Billirubin , prothrombine time, alkpo4
	Viral marker HBsAg
To establish diagnosis	USG of whole abdomen
	USG guided FNAC from liver
To find out the primary site	CXA PA
	Endoscopy of upper GIT
	Colonoscopy
Tumor marker	Alpha feto protein and
	CEA
To see the general status of patient	CBC , ESR
	Renal function test –S.creatinine
	RBS

What is the treatment			
primary HCC	Rx depend on	Child—Pugh score	
		PST /performance status	
		Size of the nodule	
		Number of nodule	
		Portal hypertension present or not	
	Hepatic resection		
	Liver transplantation		
	Percutaneous ablation	Ethanol injection	
		Radiofrequency ablation	
	Trans aterial Chemo-embolisation	Adriamycin and gelfoam	
	Chemotherapy	Sorafenib	
secondary HCC	is chemotherapy		

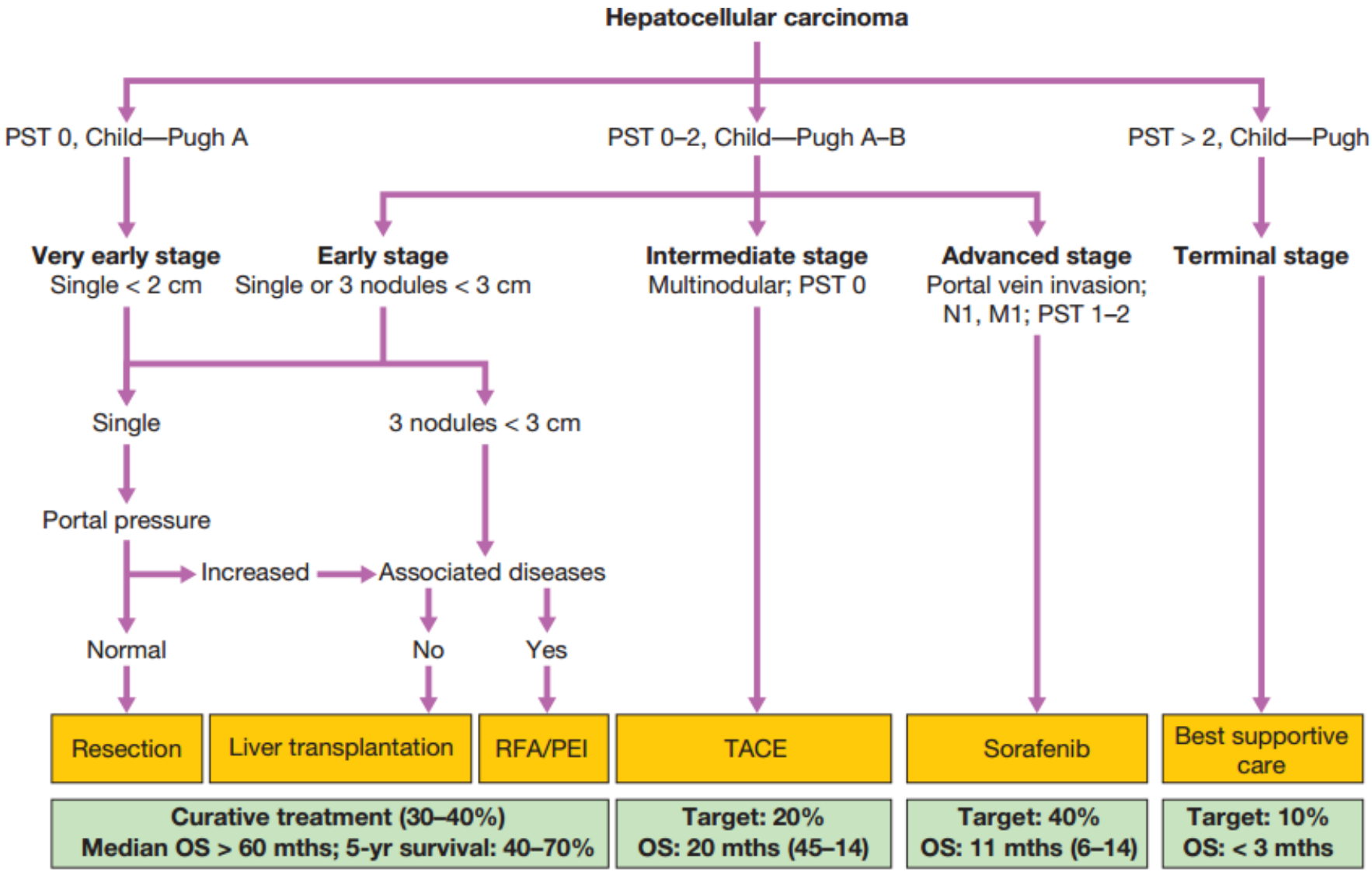
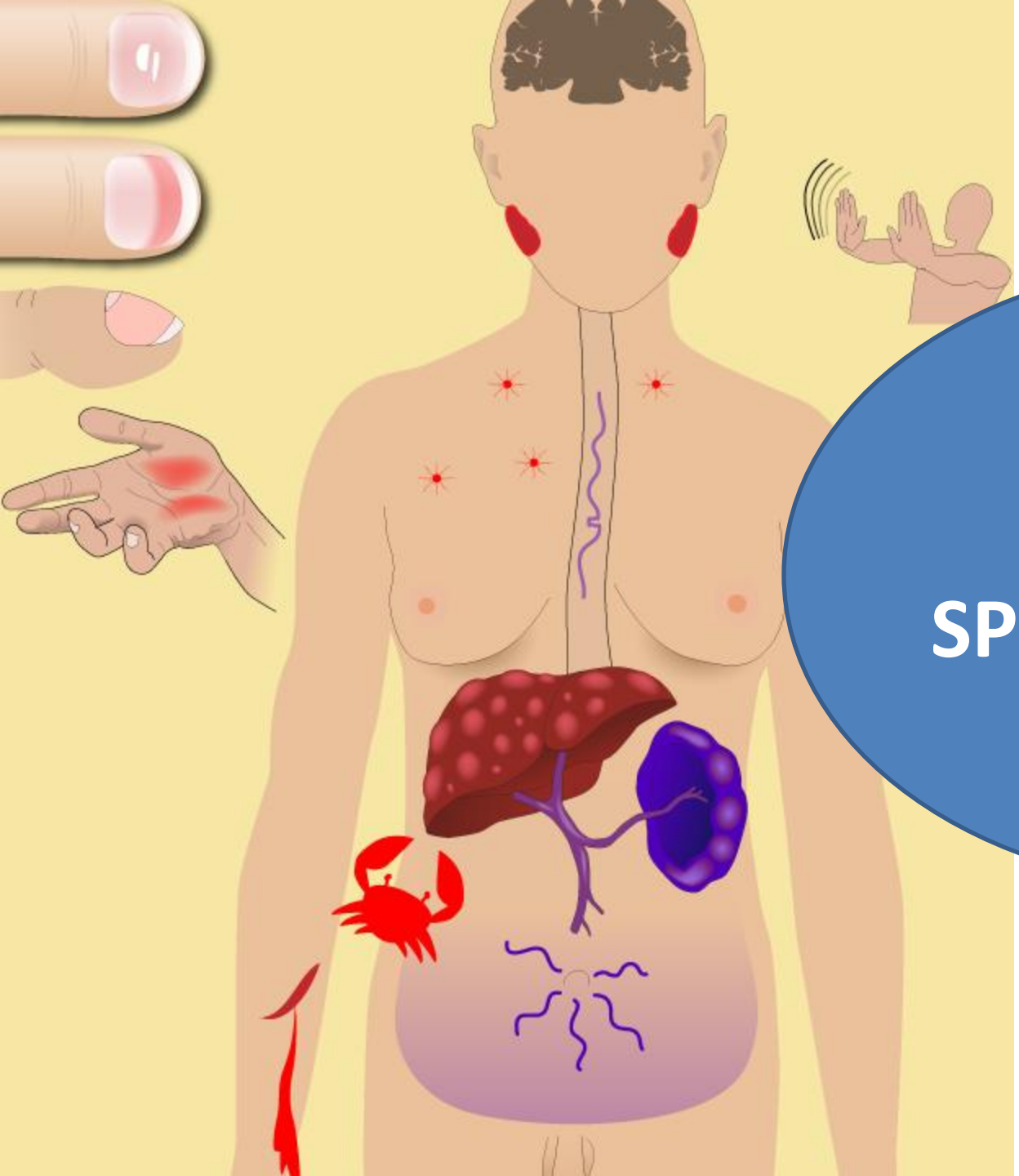


Fig. 23.35 Management of hepatocellular carcinoma complicating cirrhosis. Performance status (PST; see Box 11.3, p. 268): 0 = fully active, no symptoms; > 2 = limited self-care, confined to bed or chair for 50% of waking hours. Child–Pugh score: see Box 23.30, p. 944. N1, M1: lymph node involvement and metastases (for TNM classification, see Box 11.4, p. 268) (OS = overall survival; PEI = percutaneous ethanol injection; RFA = radiofrequency ablation; TACE = trans-arterial chemo-embolisation). Based on EASL–EORTC Clinical Practice Guidelines 2012 – see p. 988.



Short case

HEPATO-SPLENOMEGALY

A **patient with hepato-splenomegaly**

This patient may have

- Hemolytic anemia
- Kala-azar
- CLD
- Lymphoma or luekaemia(CML)

In short case what ever patient diagnosis u will told ur diagnosis on basis of examination finding as u cannot ask history

Q. palpates the abdomen?

First do superficial and deep palpation then goes liver and spleen palpation ?

What is ur finding ?

In superficial and deep palpation of abdomen of this middle age patient reveal that the patient temperature of abdomen is normal, no tenderness, hyperesthesia, rigidity.

Organ palpation reveals the liver is enlarge(say palpable if span > 13cm) which is 7cm from right costal margin at mid clavicular line and 5 cm from Xephoid process non tender , having smooth surface , firm in consistency , sharp margin ,upper border of liver dullness is in 5th intercostals space , liver span is 15 cm and no hepatic bruit.

Palpation of spleen of this middle age person reveals spleen is moderately enlarge which is 7cm from left costal margin at ant-axillary line toward the right iliac fossa / umbilicus / along it long axis ,margin is rounded which is non tender having smooth surface firm inconsistency , percussion note is dull , spleenic rub is absent , finger insinuation is not possible and not bimanually ballotable

What is ur diagnosis? .

I have some differential diagnosis and for these region (these are in Box)I want to do some relevant

Appearance	Hemolytic faces –thalassaemia Hepatic faces --CLD
Anemia	Kala-azar, lymphoma , leukemia and Thalassaemia
Jaundice	CLD , lymphoma and thalassaemia
Lymph node	lymphoma , CLL
Temp ---↑	Kala-azar and
Boney tenderness	Leukemia
Look for stigmata of CLD	
Palmer erythema	Gynaecomastia Spider naevi
Engorged vein	Testicular atrophy Ascites

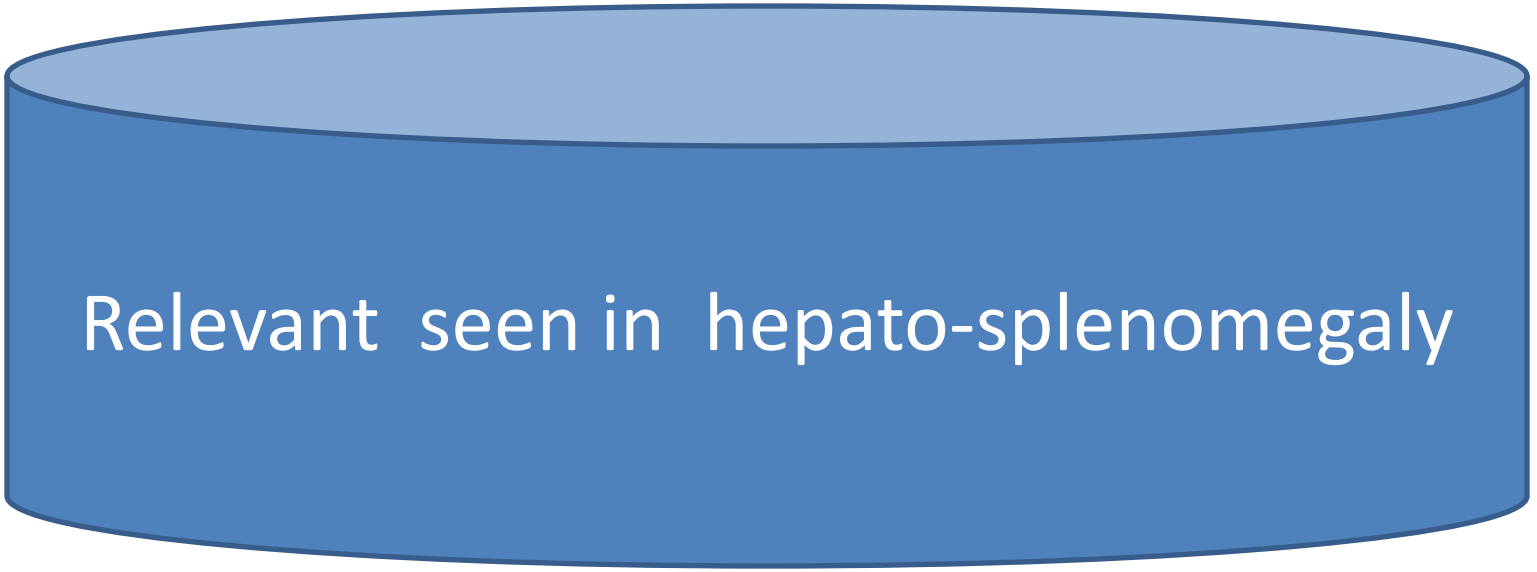
Cause of hepatosplenomegaly

KamaL-3 my thal
Ka-Kala-azar
Ma-malaria
L1-CLD with portal HTN
L2-lymphoma
L3---leukemia
Incase of child
Thal--Hemolytic anemia
Old age
My--Mylofibrosis
Chronic myeloid leukemia

At least if examiner asked what else then say –disseminate TB
Fluid thrill absent and testis is normal in size and consistency.

Tell this differential diagnosis which appropriate according the clinical finding	Point favor of diagnosis are
Hemolytic anemia	• Pt is usually young • Hemolytic face –depressed nasal bone,malar Prominence • Severe anemia and mild jaundice • Hepato-splenomegaly • Blackish skin –hemochromatosis
CLD	Stigmata of CLD • Hepatic faces • Jaundice • Palmer erythema • Spider naevi • Gynaecomastia • Engorged vein • Ascites • Testicular atrophy • Hepato-splenomegaly

Kala-azar	Endemic zoon whole mymensingh . Anemia Temperature / HO fever Hepatolmegaly
Lymphoma	Anemia / jaundice Generalized lymphadenopathy Hepato-splenomgal Fever and wt loss
Leukemia	Anemia Patent toxic Boney tenderness Lymphadenopathy + / - Hepato-splenomegaly
If the patient is old age	
Chronic myeloid leukemia	Anemia Hepato splenomegaly
Myelofibrosis	Anemia Hepato splenomegaly


Relevant seen in hepato-splenomegaly

Appearance

Thalassamia

frontal bossing , depressed nasal bridge , mal occlusion of upper incision teeth

CLD

Shunken eyes
Hollowed temporal fossa
Pinched up nose with malar prominance
Parched lips
Muddy complexion of face
Icteric change of conjunctiva
Shallow and dry face

Anaemia

Kala-azar, lymphoma , leukemia and Thalassaemia

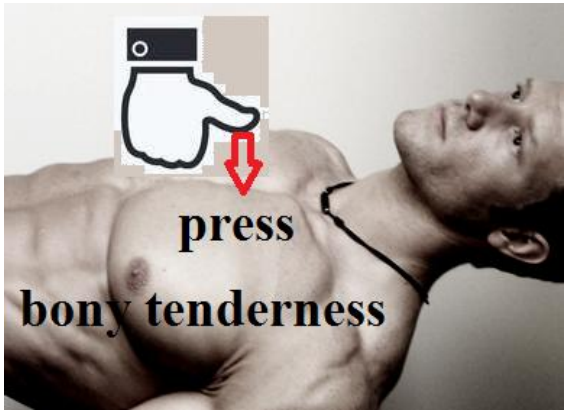
Jaundice

CLD , lymphoma and thalassaemia

Lymph-adenopathy

lymphoma , CLL

Boney tenderness



leukemia

stigma of CLD





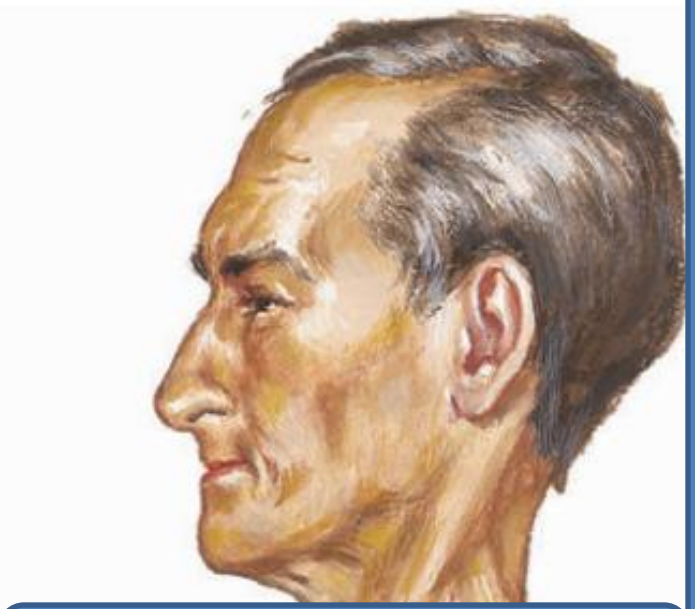



Effects of portal hypertension

- Esophageal varices
  - Hematemesis
  - Gastropathy
- Melena
- Splenomegaly
- Dilated abdominal veins (caput medusae)
- Ascites
- Rectal varices (hemorrhoids)

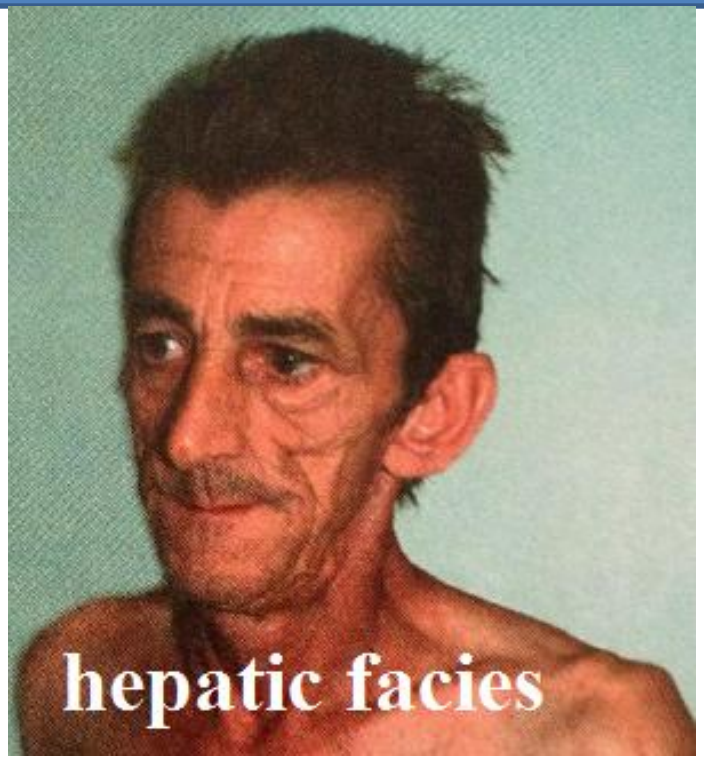
Effects of liver cell failure

- Coma
- Fetor hepaticus (breath smells like a freshly opened corpse)
- Spider nevi
- Gynecomastia
- Jaundice
- Ascites
- Loss of sexual hair
- Testicular atrophy
- Liver flap (coarse hand tremor)
- Bleeding tendency (decreased prothrombin)
- Anemia
  - -Macrocytic
  - -Iron deficiency (blood loss)
- Ankle edema

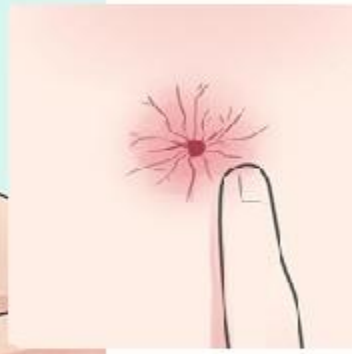


Shunken eyes
Hollowed temporal fossa
Pinched up nose with malar symptoms
Parched lips
Muddy complexion of face
Icteric change of conjunctiva
Shallow and dry face

Hepatic facies

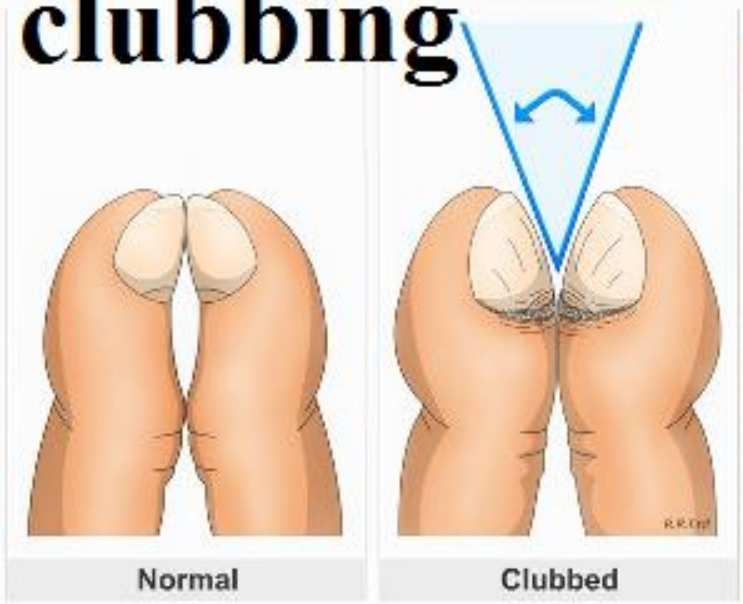


Loss of body hairs



Spider navei

clubbing

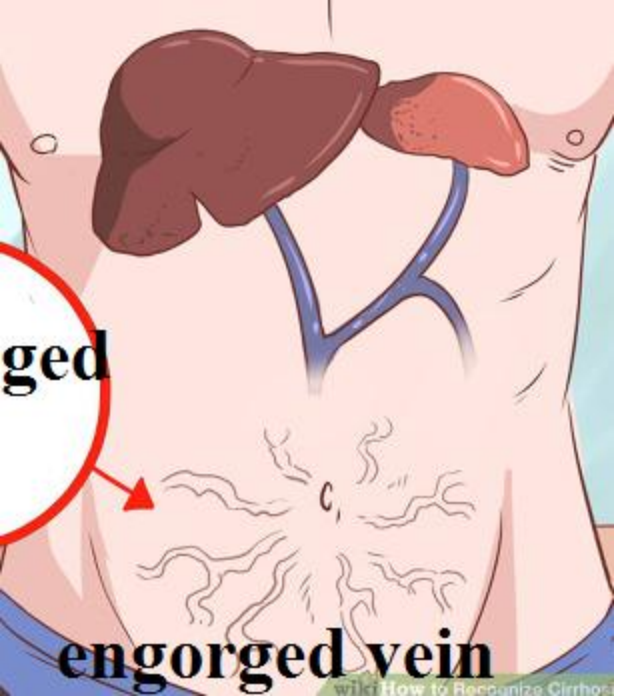


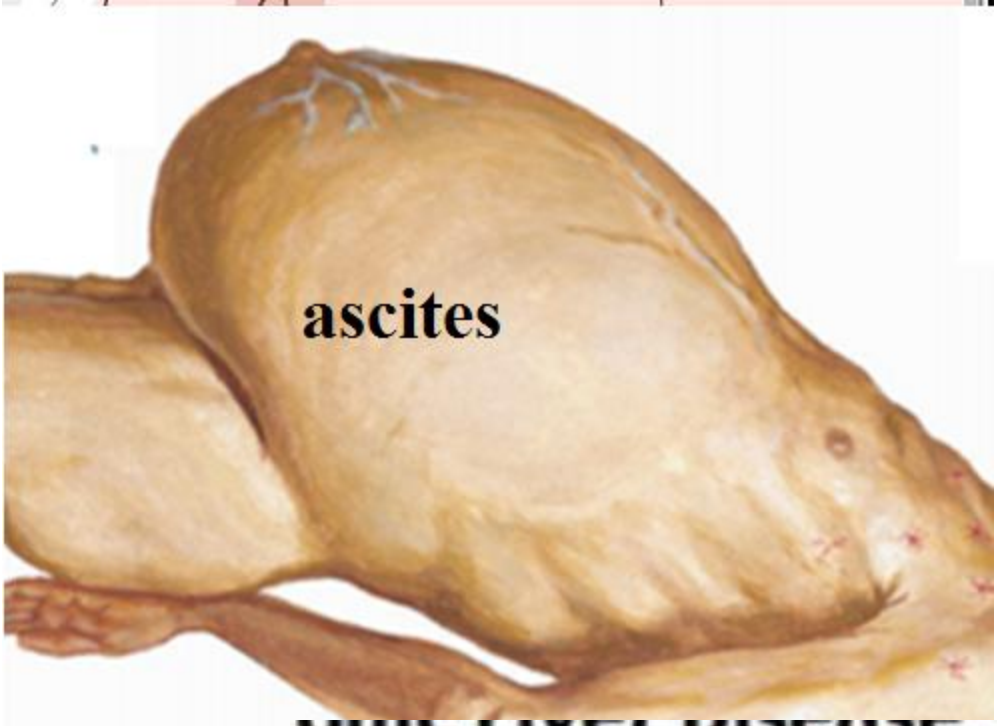
leukonychia

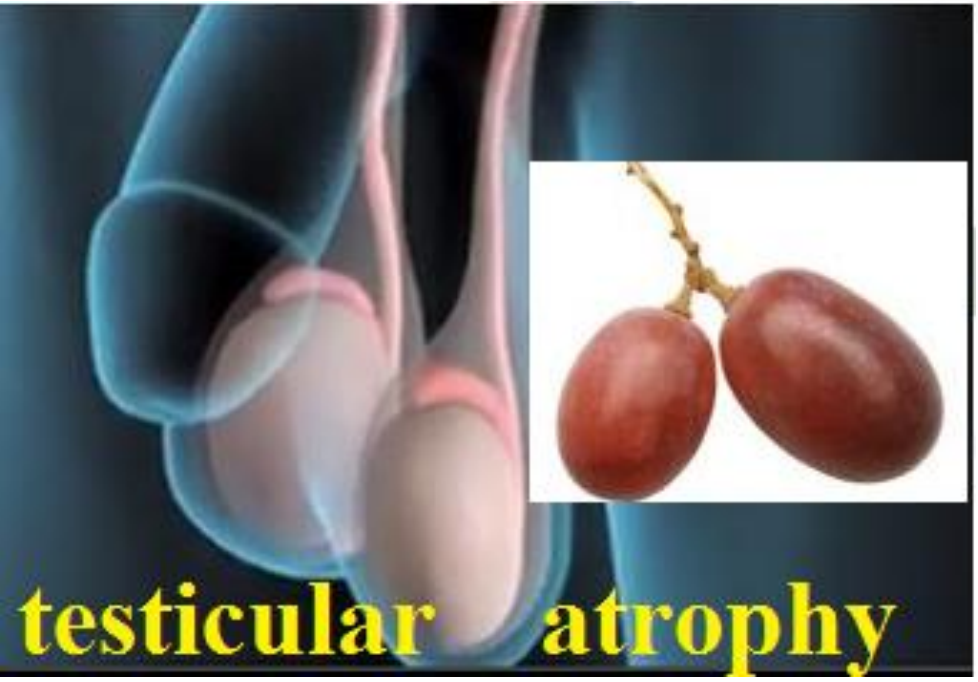
palmer erythema

dupuytren contracture

Flapping tremor(Asterixis)


ged
engorged vein


ascites


testicular atrophy


odema

What is u diagnosis & what r point in favor Dx?

Suppose it is a case thalassaemia –u will u tell the point from the box

Next question will be why not it is a case of CLD or

Lymphoma

Kala-azar

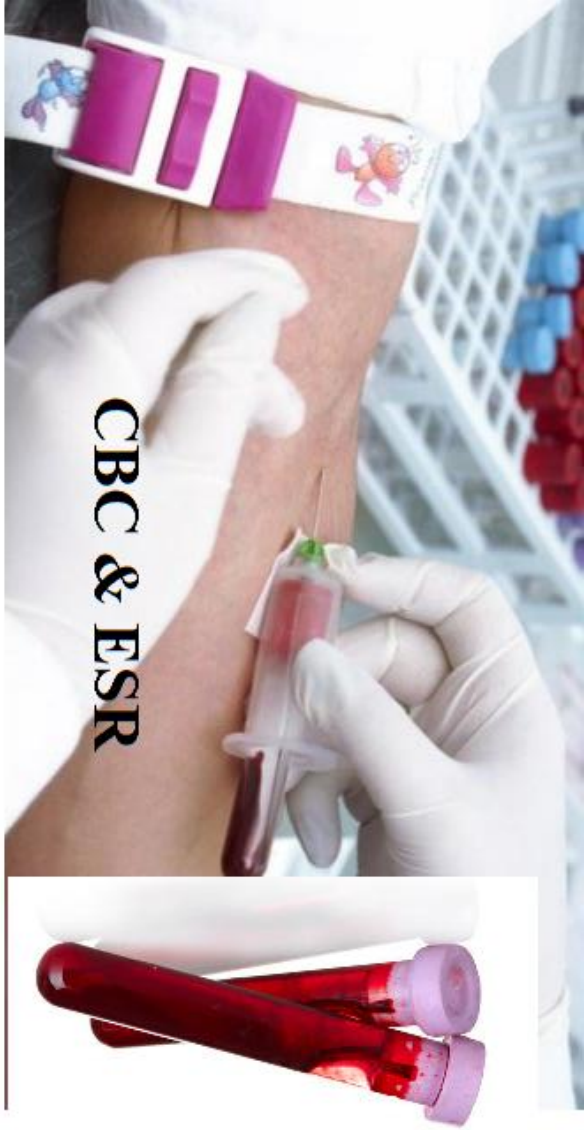
U tell the examiners that I do not got these point (see the box) in favor CLD , Lymphoma, Kala-azar

CBC	**Anaemia – KALA-AZAR , CLD, hemolytic anamia**	
	High ESR --- KALA-AZAR	
	Progressive leucopenia – KALA-AZAR	
	Leucocytosis with immarture wbc or blas cell --CML	
PBF	Pancytopenia --- KALA-AZAR , LEUKAMIA with blast crisis CLD with hypersplenism , LYMPHOMA	
	Microcytic –hypochromic anaemia – thalassamia	
ICT FOR KALA-AZAR	KALA-AZAR	
ICT for MALARIA	Malaria	
Liver function test	Bilirubin	CLD , thalassamia
	ALT,AST ,PT	CLD
	AG ratio	
Viral marker	HBsAg HBeAg Anti-HBV DNA	
	Anti- HCV	

USG	**Liver coarese , spleeno megaly Ascites**	**CLD**
	Gut thickening	TB
	intra-abdominal lymphnode	Lymphoma
CXR	TB --	
	Lymphnode	Lymphoma
Hb elcetrophoresis	Thalassamia	
s.Feritin	↑↑ thalassamia	
Splenic puncture	LD-body	Kala-azar
Bone marrow	LD-body	Kala-azar
	Blast cell	Leukemia
	Philadelphia chromosome	CML

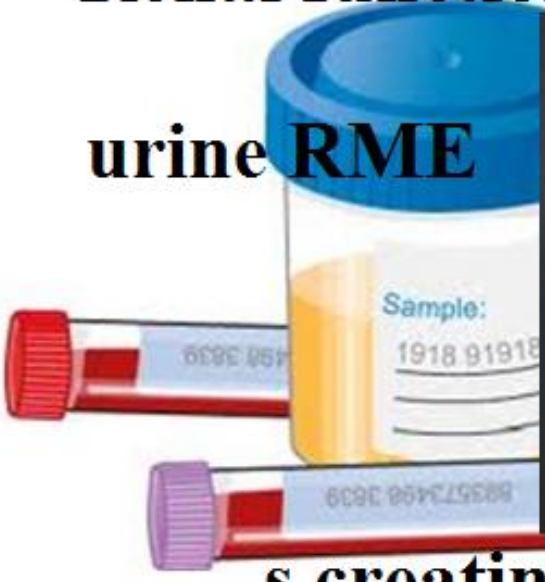
Endoscopy of upper GIT	**Endoscopy of To see the varices**
Colonoscopy	iliocaecal TB , ca colon
Barrium follow through	TB
Liver biopsy	CLD
Liver fibroscan	
X-RAY Skull	Thalassamia

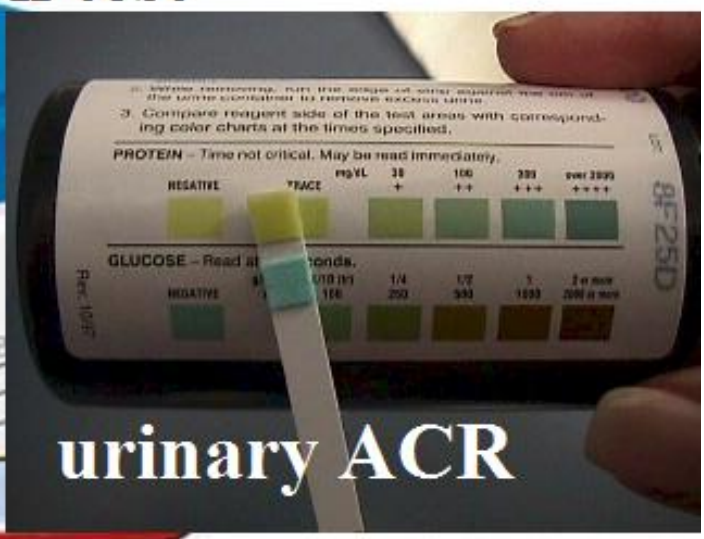

Investigation



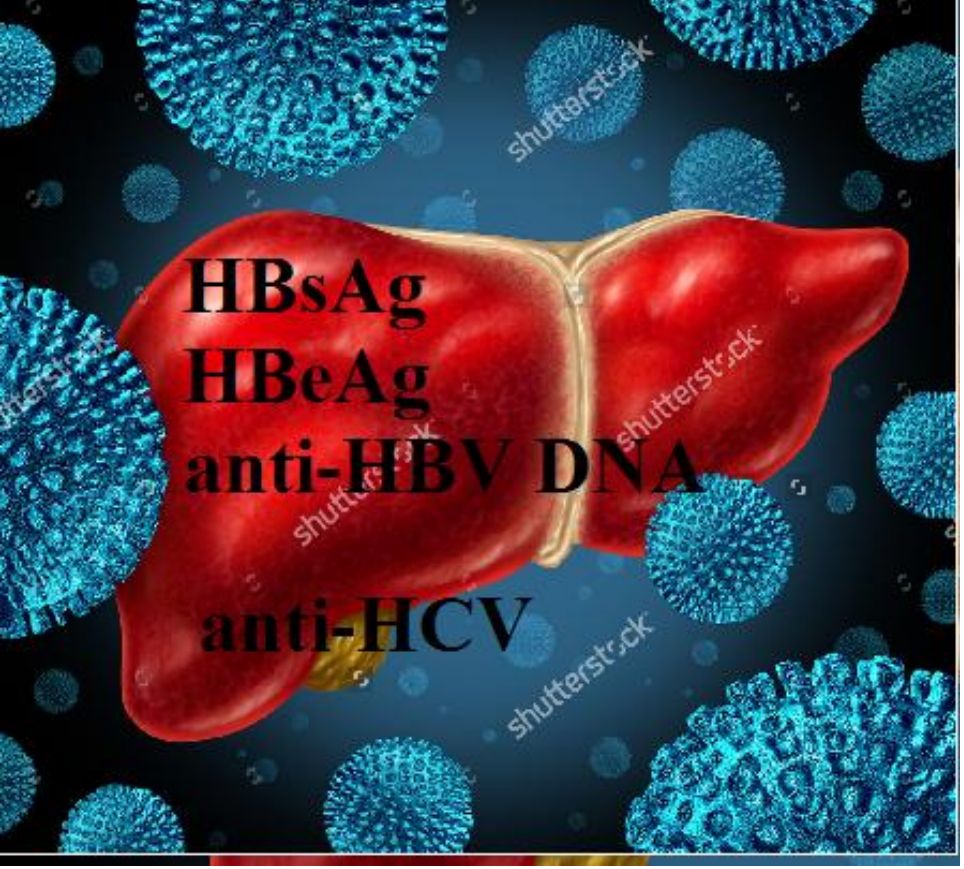
Renal function test

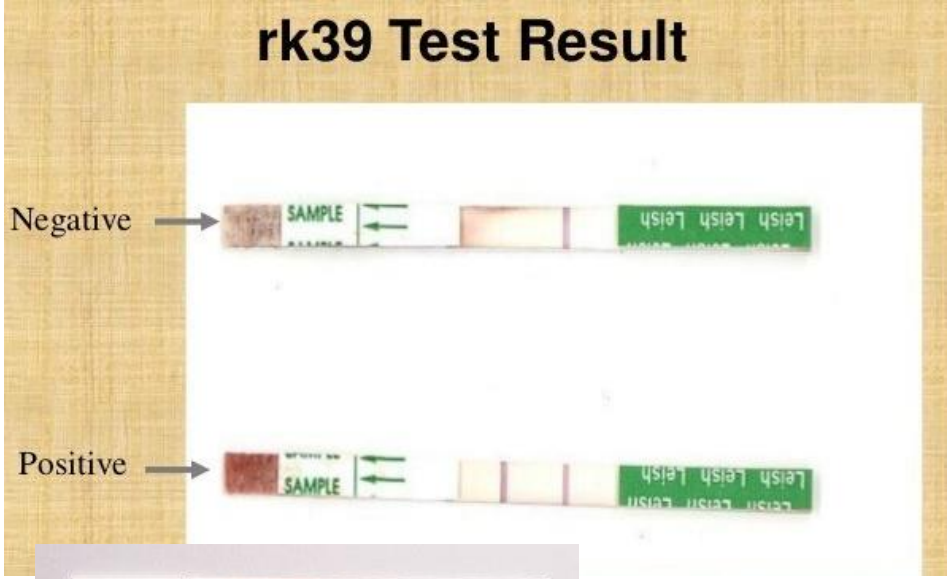
urine RME

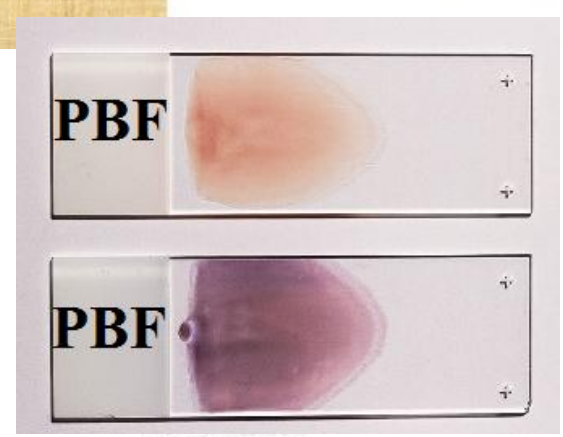


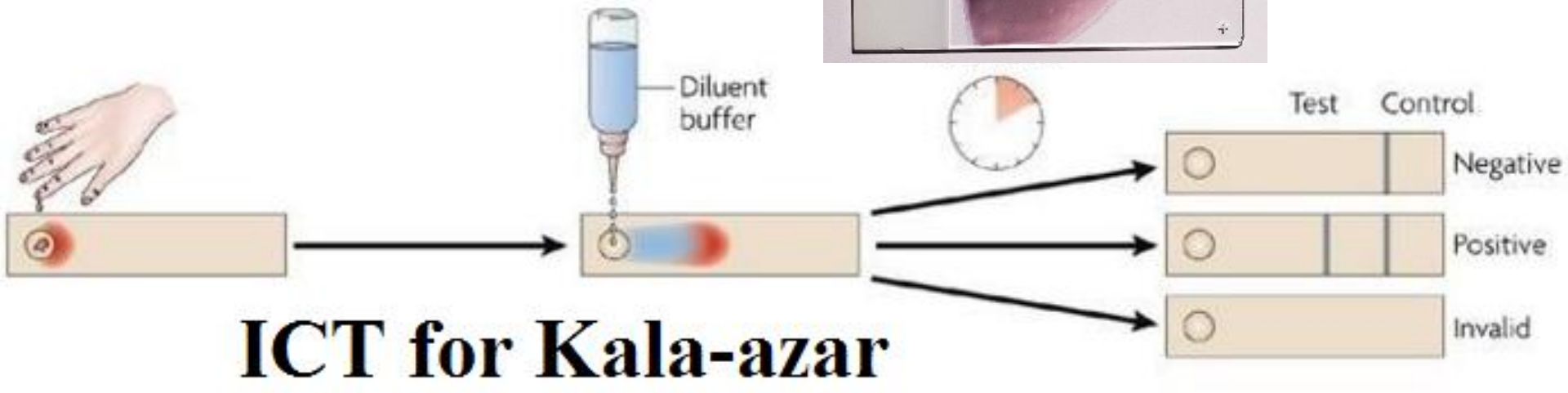


s.creatinine



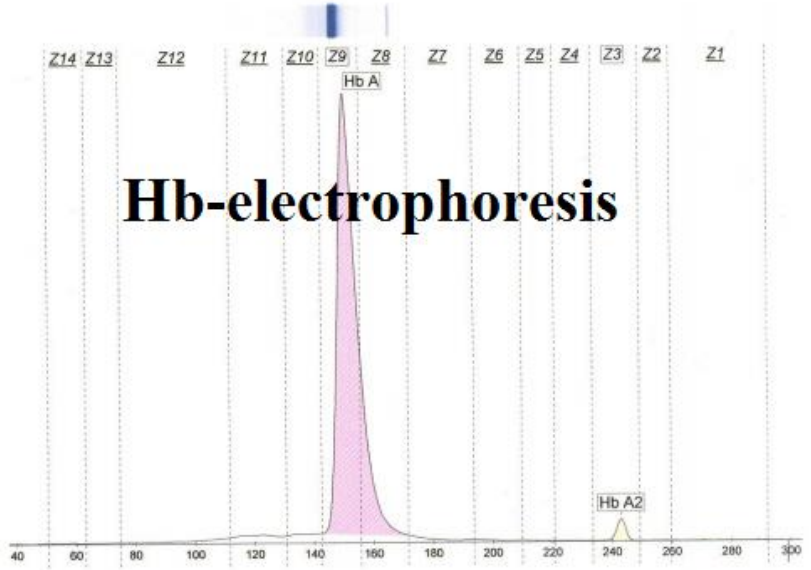






ICT for Kala-azar

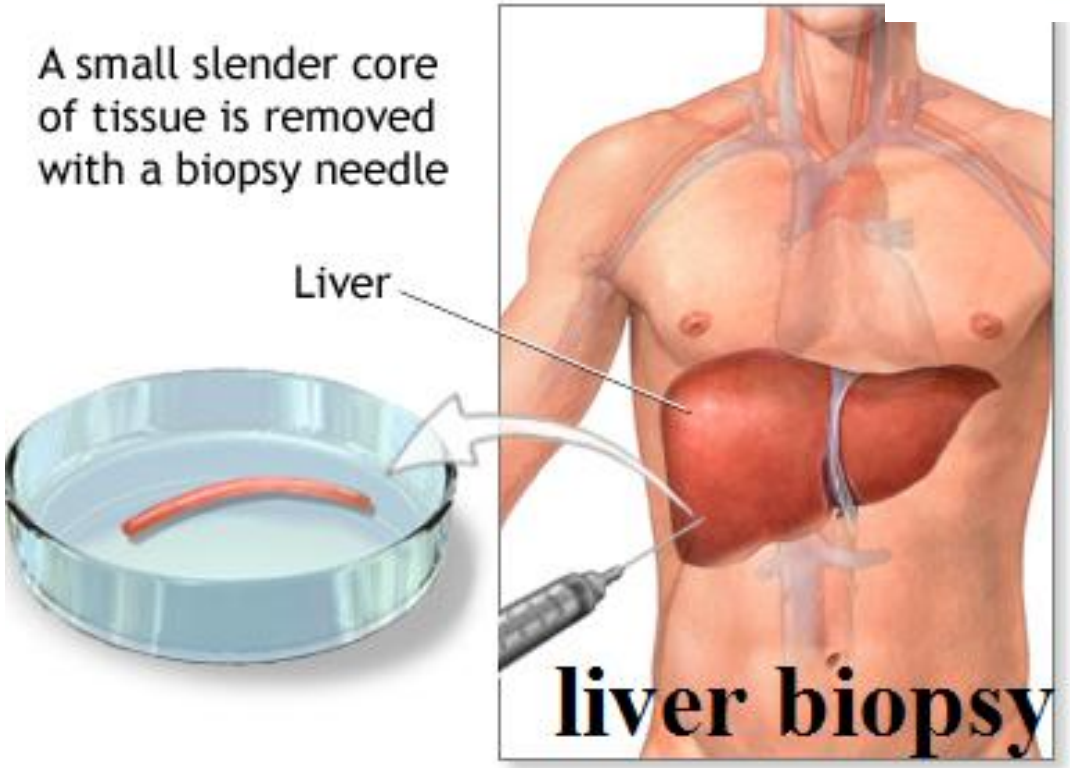
endoscopy of upper git



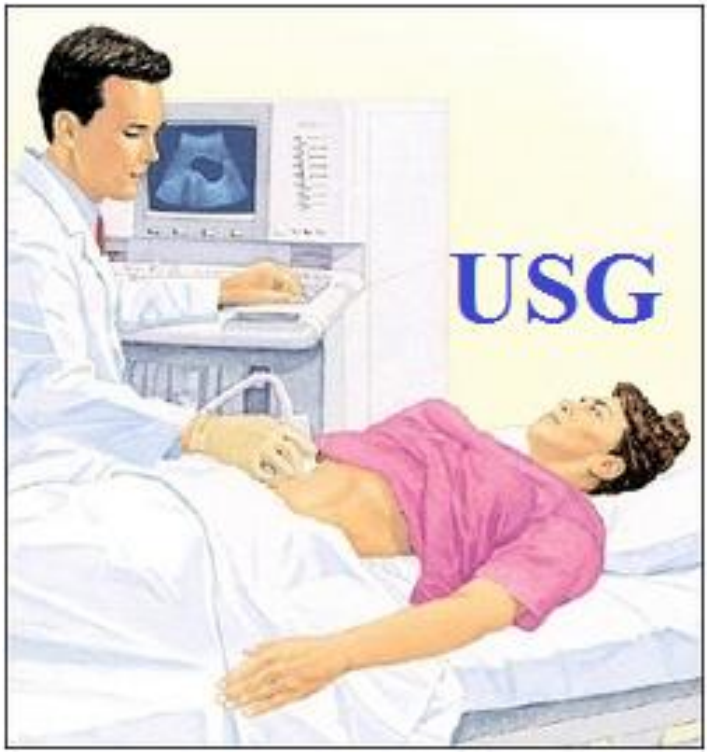
Hb-electrophoresis

Hemoglobin Electrophoresis

A small slender core of tissue is removed with a biopsy needle



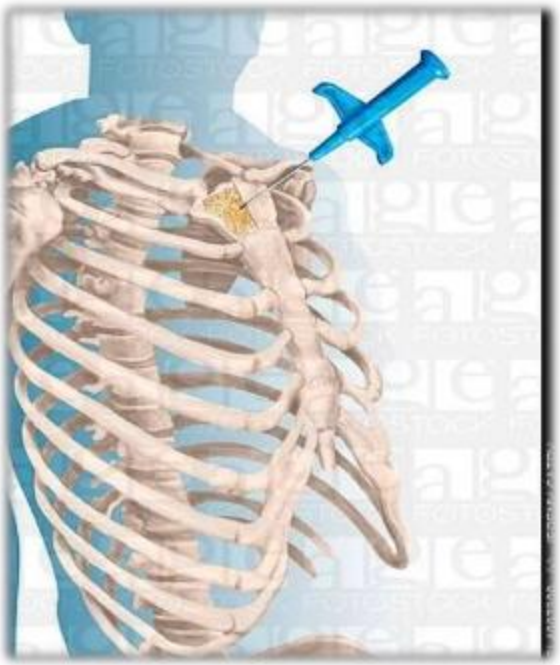
liver biopsy



bone marrow

ILIAC CREST

STERNUM



Short case NO
:::::::::THREE:::::::
SPLENOMEGALY

A patient with only splenomegaly ?
It may be just palpable / mild < 4 cm
Or
Moderate to huge splenomegaly > 4 ---8
A patient with huge splenomegaly ?
Palpate the spleen follow the appropriate sequence

Tell u finding as follow :
Palpation of spleen of this middle age person reveals that spleen is moderately enlarge which is 7cm from left costal margin at ant-axillary line toward the right iliac fossa / umbilicus / along it long axis ,margin is rounded which is non tender having smooth surface firm inconsistency ,there is a notch in its upper border, percussion note is dull , spleenic rub is absent , finger insinuation is not possible and not bimanually ballotable
What is ur diagnosis?
I have some differential diagnosis and for these region (these are in Box) I want to do some relevant
What r the differential diagnosis ?
see box

Cause of hepatosplenomegaly
KamaL-3 my thal
- **Ka-Kala-azar**
- **Ma-malaria**
- **L1-CLD with portal HTN**
- **L2-lymphoma**
- **L3---leukemia**

Incase of child
Thal--Hemolytic anemia
Old age
My—Myelo fibrosis
chronic myeloid leukemia
At least if examiner asked what else then say –
Disseminate TB

What relevant u want to see ?	
Appearance	Hemolytic faces –thalassaemia Hepatic faces --CLD
Anemia	Kala-azar, lymphoma , leukemia and Thalassaemia
Jaundice	CLD , lymphoma and thalassaemia
Lymph node	lymphoma , CLL
Temp ---↑	Kala-azar and
Boney tenderness	Leukemia
Look for stigmata of CLD	
Palmer erythema	Gynaecomastia Spider naevi
Engorged vein	Testicular atrophy Ascites

Why this is not kidney?

It is not kidney because

- ❖Finger insinuation is not possible
- ❖Not Ballotable with both hand
- ❖Percussion note is dull (in kidney band of resonance due to colonic gass)
- ❖Move early with respiration and inlarge toward the right iliac fossa

Why this is hemolytic anemia ? **My diagnosis is hemolytic anemia :** • Pt is usually young • Hemolytic face –Depressed nasal bone, malar prominence , frontal bossing • Severe anemia and mild jaundice • Hepato-splenomegaly • Blackish skin –hemochromatosis	**Why this is not hemolytic anemia ?** Patient have only hepatosplenomegaly but Not have the others feature of hemolytic anemia : • Hemolytic face –Depressed nasal bone, malar prominence , frontal bossing • Severe anemia and mild jaundice • Blackish skin –hemochromatosis
Why this a CLD? or This is CLD with portal HTN because patient have Stigmata of CLD(tell only those u get in this pt) • Hepatic faces • Jaundice • Palmer erythema • Spider naevi • Gynaecomastia • Engorged vein • Ascites • Testicular atrophy • Hepato-splenomegaly	Why this not a case of CLD? Patient have only hepatosplenomegaly but no HO of stigmata of CLD • Hepatic faces • Jaundice • Palmer erythema • Spider naevi • Gynaecomastia • Engorged vein • Ascites • Testicular atrophy
Why u is a case of kala –azar Because the patient has the following Endemic zone (mymensingh) • Anemia • Temperature / fever • Hepatosplenomegaly	Why not kala-azar? Only hepatosplenomegaly Have not • Anemia • Temperature / fever • Not come from endemic zone

Lymphoma because the pt have • Anemia / jaundice • Generalized lymphadenopathy • Hepato-splenomgaly • Fever and wt loss	Not lymphoma as the patient have only Hepato-splenomgal not have • Anemia / jaundice • Generalized lymphadenopathy • Fever and wt loss
Why this not a case of leukemia This is a case of leukemia because the pt have • Anemia • Patent toxic • Boney tenderness • Lymphadenopathy + / - • Hepato-splenomegaly If patient is old then tell examiner that May be a case of CML or mylofibrosis Anemia and massive splenomegaly If the pt is child and boney tenderness is present then diagnosis will be ---ALL If the patient is adult and boney tenderness is present then diagnosis will be AML	**Why this not a case of leukemia** This is not a case of leukemia because the pt have only slplenomegaly but • Anemia • Patent toxic • Boney tenderness • Lymphadenopathy + / -

Short case::::::::FOUR:::::::JUST/ MILD SPLENOMEGALY
Some times u may give mild splenomegaly / just palpable

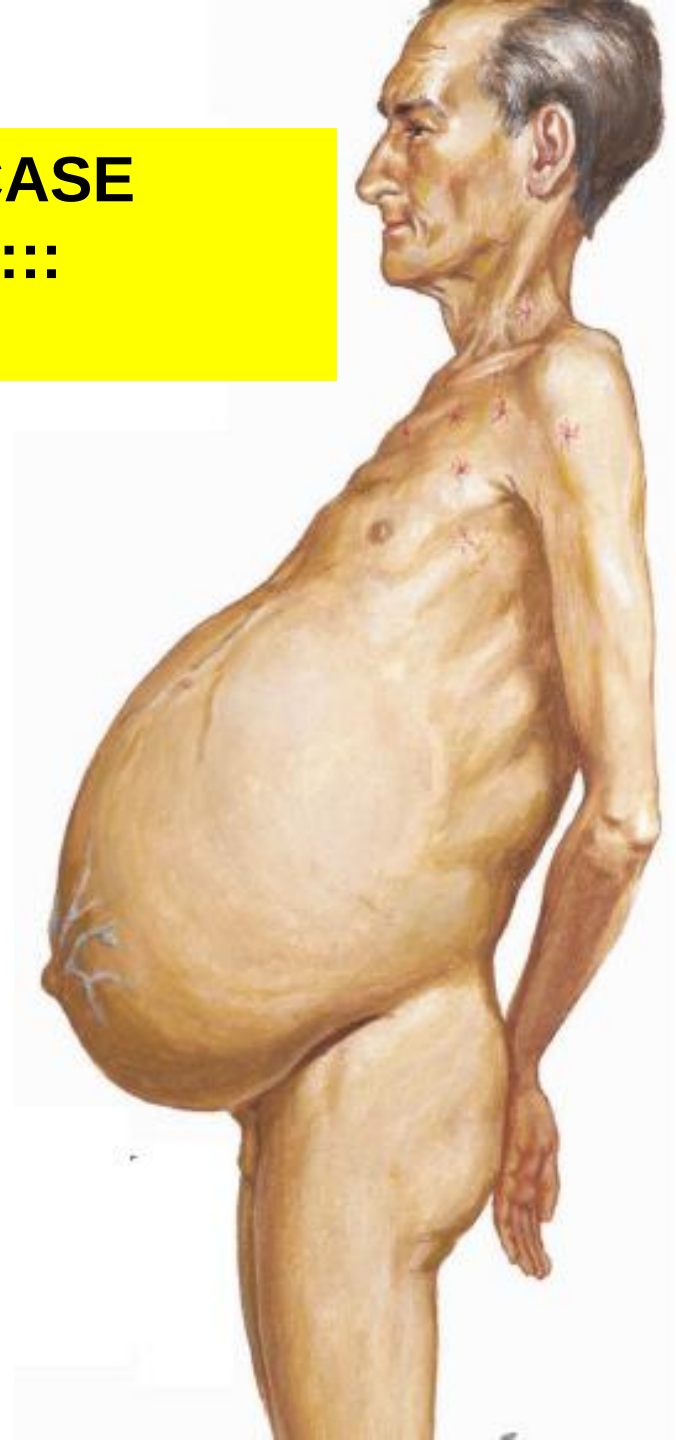
Description like that of huge splenomegaly
Palpation of spleen of this middle age person reveals that spleen is moderately enlarge which is 3cm from left costal margin at ant-axillary line toward the right iliac fossa / umbilicus / along it long axis ,margin is rounded which is non tender having smooth surface firm inconsistency , percussion note is dull , spleenic rub is absent , finger insinuation is not possible and not bimanually ballotable

What is diagnosis?
I have some differential diagnosis in mind that why I want to see some relevant
Such as

First tell the box of huge splenomegaly	
F o r SBE	Clubbing ,splinter haemorrhage , murmur
Enteric fever / malaria	Temp.
SLE / connective tissue disease	Joint swell & tenderness Rash & female patient

What are causes of just palpable spleen?
- Enteric fever
- Malaria
- Subacute bacterial endocarditis
- SLE
- **Other cause of spelnomegaly**
  - Lymphoma
  - Leukemia
  - CLD with Portal HTN
  - Disseminated TB

SHORT CASE
:::::five::::::
ASCITES



In u r exam there u may a short case find a short case of ascites :Such as

- Ascites due to CLD with portal HTN
- Ascites due to TB
- Ascites due to intra abdominal malignancy
- Rarely u in NS patient sir ask do exam of ascites

What ever the diagnosis of the pt u have to examine the patient according to procedure and tell the diagnosis on the basis of ur clinical finding not on what written in the file of the pt in which it was diagnosed on basis of investigation

NEVER FORGET TO PALPATE
IN DIPPING METHOD
IN ASCITES PATIENT

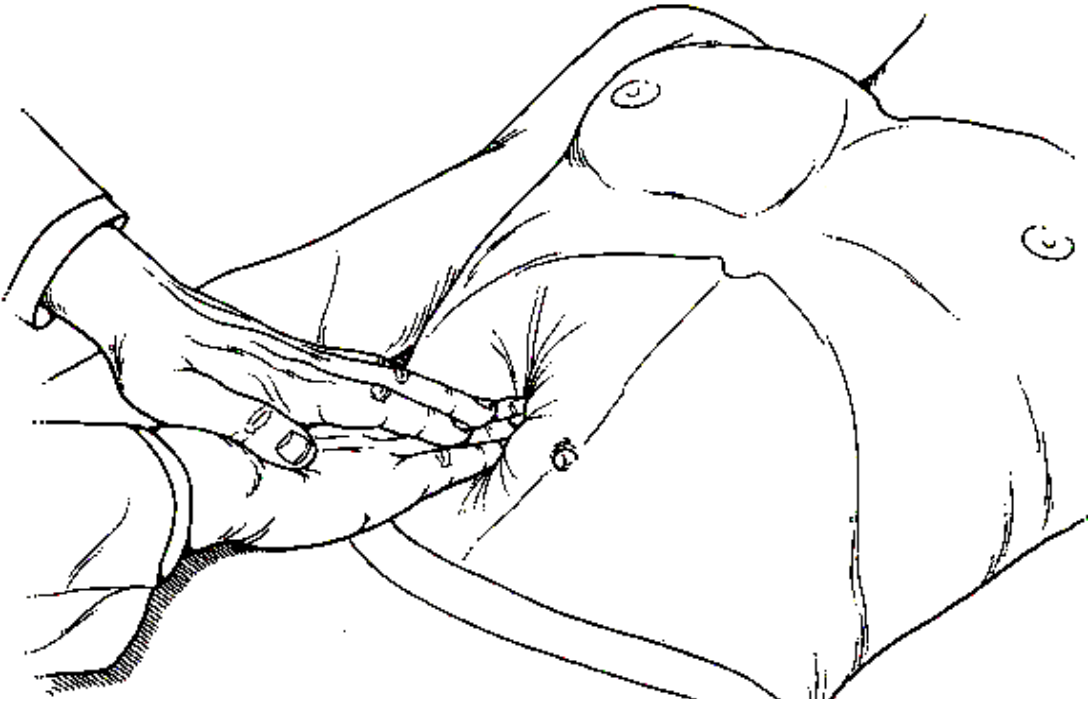
Describe the finding of ascites

- Inspection / examination of abdomen of this middle age person reveals that abdomen is hugely distended, umbilicus is central, everted having transvers slit, flanks are full. There are some engorged veins, flow of which is upward. No visible peristalsis, no pigmentation, no striae and hernia orifice is intact.
- Superficial and deep palpation reveals normal temperature and no rigidity, hyperesthesia, tenderness and intra or extra abdominal lump.
- Liver and spleen cannot delineated as to huge ascites .
- And testis in normal size and shape (or testes are atrophied / testicular atrophy present)
- Fluid thrill present and shifting dullness present
- Bowel sound present and renal bruit absent

In ascites patient palpate the abdomen in dipping method

Deep palpation in dipping method

Put one hand upon another and give gentle two pressure down ward and inward and feel for any palpable lump .
First pressure will remove the water and second pressure will help to feel the lump



Liver palpation in dipping

Put one hand upon another and give gentle two pressure down ward and inward and feel for any palpable lump .
First pressure will remove the water and second pressure will help to feel the lump

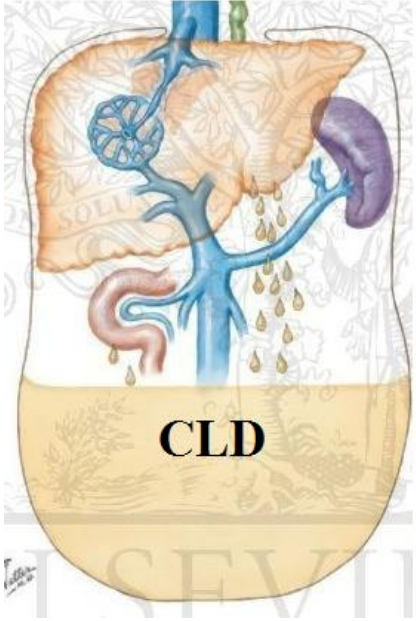
Palpation of spleen is dipping method

Put one hand upon another and give gentle two pressure down ward and inward and feel for any palpable lump .
First pressure will remove the water and second pressure will help to feel the lump

The differential diagnosis

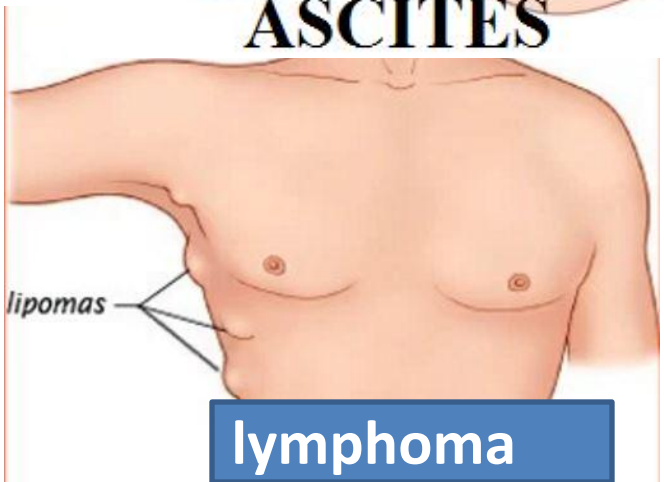
- CLD with portal HTN
- Abdominal TB
- Intra abdominal malignancy
- CCF
- NS
- lymphoma

Abdominal TB

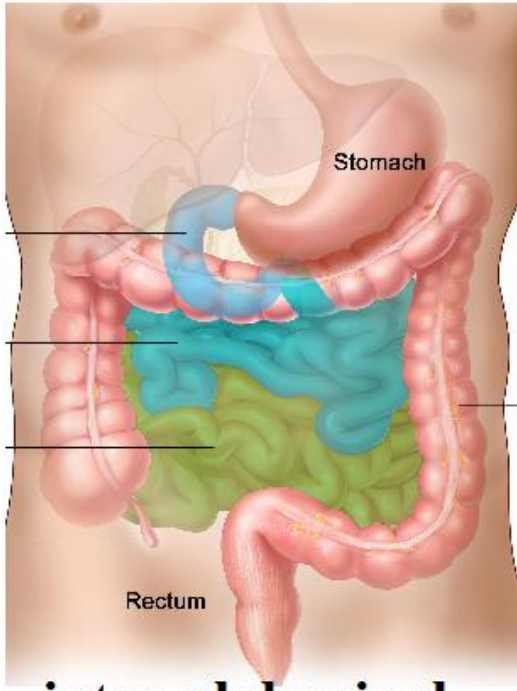


NEPHROTIC SYNDROME

CAUSE OF ASCITES



lymphoma



intra abdominal malignancy

For CLD **see Stigmata of CLD**	**For CCF**
1. Hepatic faces 2. Jaundice – 3. Spider naevi 4. Gynaecomascia 5. Loss of body and pubic hair 6. Palmer erythema 7. Leukonychia 8. Oedema	1. Raised JVP 2. Tender hepatomegaly 3. Depended edema 4. Lung –crep +/- 5. Ronchi / vesicular breath sound prolong expiration 6. Murmur 7. Left para sternal heave & Loud P2 8. Apex beat –shifted
Abdominal TB	Intra abdominal malignancy with peritoneal shidling
1. Low grade Fever 2. Weight loss / cachexic 3. Doughy feeling of abdomen 4. Auscultation of lung	1. Verchows gland (left supraclavicular LN) 1. Or other lymphadenopathy 2. Alteration of bowel habit

What is u r finding ?
The patient have ascites evidence by fluid thrill and shifting dullness

What is ur diagnosis?
I have some differential diagnosis in my mind and for This I want to do some relevant examination of this pt

What relevant u want to see?

stigma of CLD





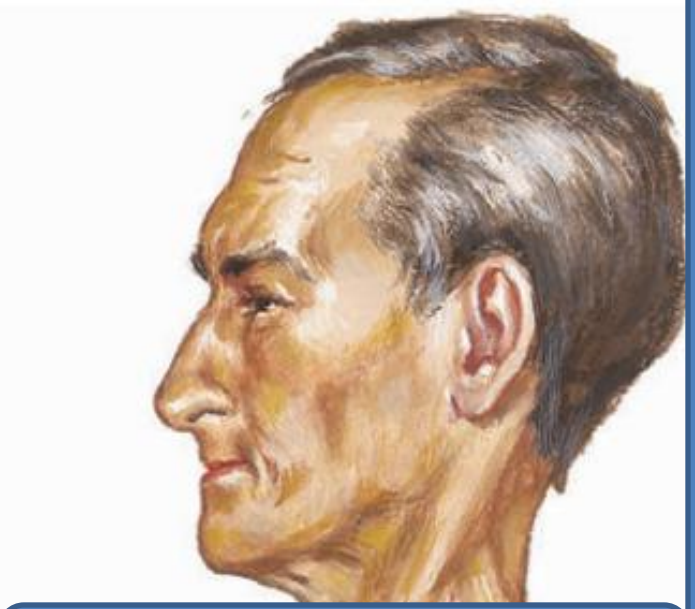



Effects of portal hypertension

- Esophageal varices
  - Hematemesis
  - Gastropathy
- Melena
- Splenomegaly
- Dilated abdominal veins (caput medusae)
- Ascites
- Rectal varices (hemorrhoids)

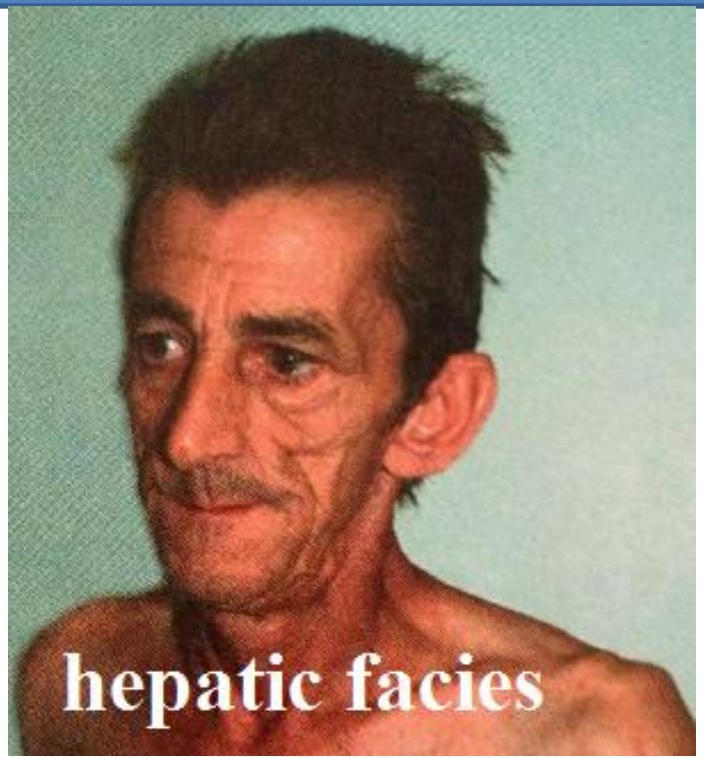
Effects of liver cell failure

- Coma
- Fetor hepaticus (breath smells like a freshly opened corpse)
- Spider nevi
- Gynecomastia
- Jaundice
- Ascites
- Loss of sexual hair
- Testicular atrophy
- Liver flap (coarse hand tremor)
- Bleeding tendency (decreased prothrombin)
- Anemia
  - -Macrocytic
  - -Iron deficiency (blood loss)
- Ankle edema

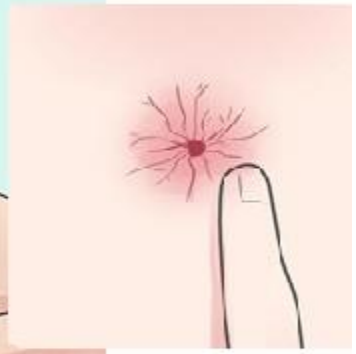


Shunken eyes
Hollowed temporal fossa
Pinched up nose with malar symptoms
Parched lips
Muddy complexion of face
Icteric change of conjunctiva
Shallow and dry face

Hepatic facies

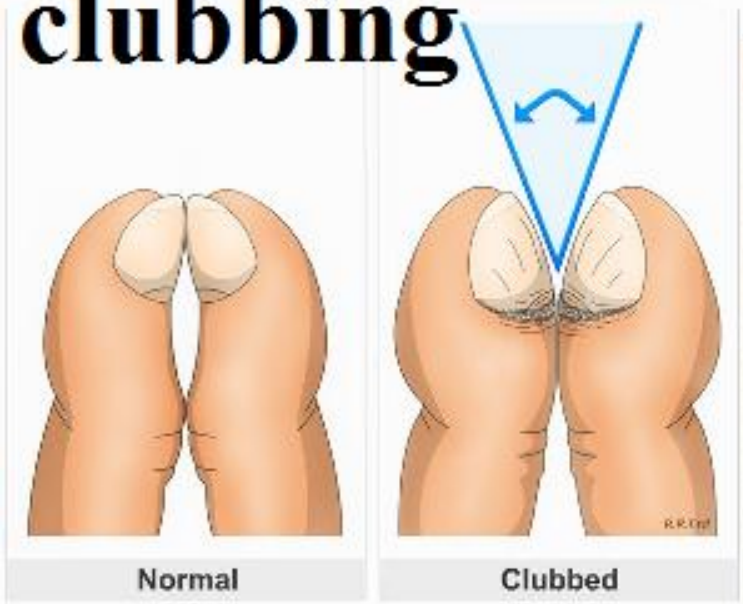


Loss of body hairs



Spider navei

clubbing

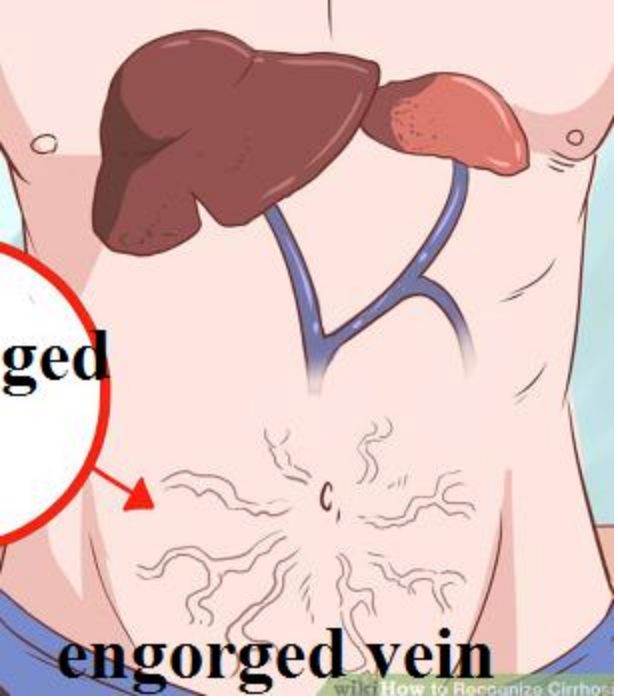


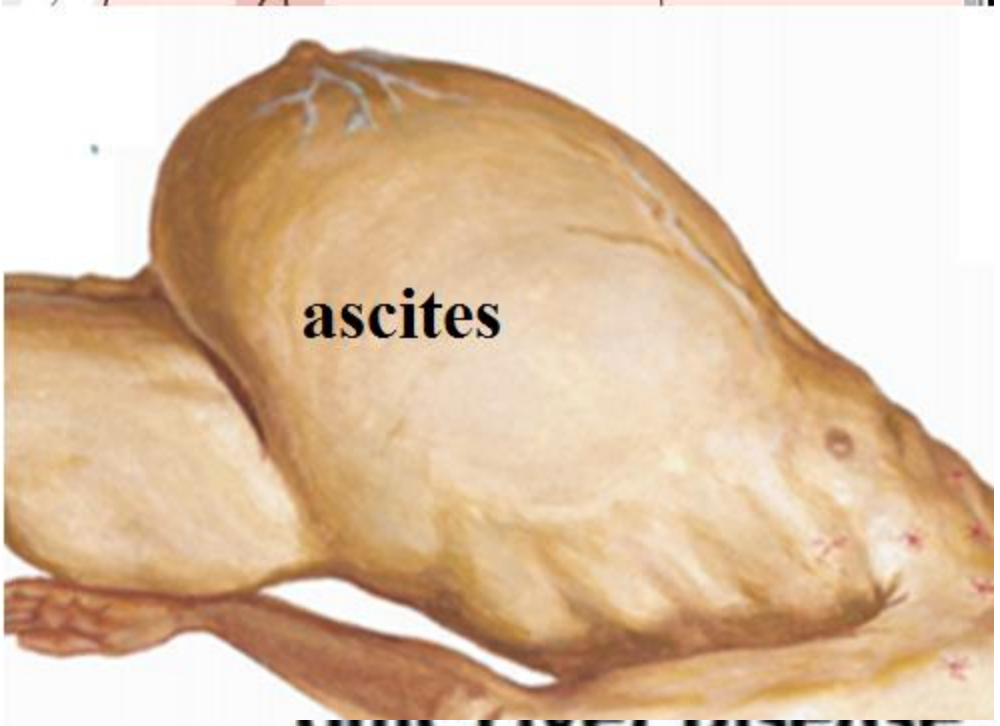
leukonychia

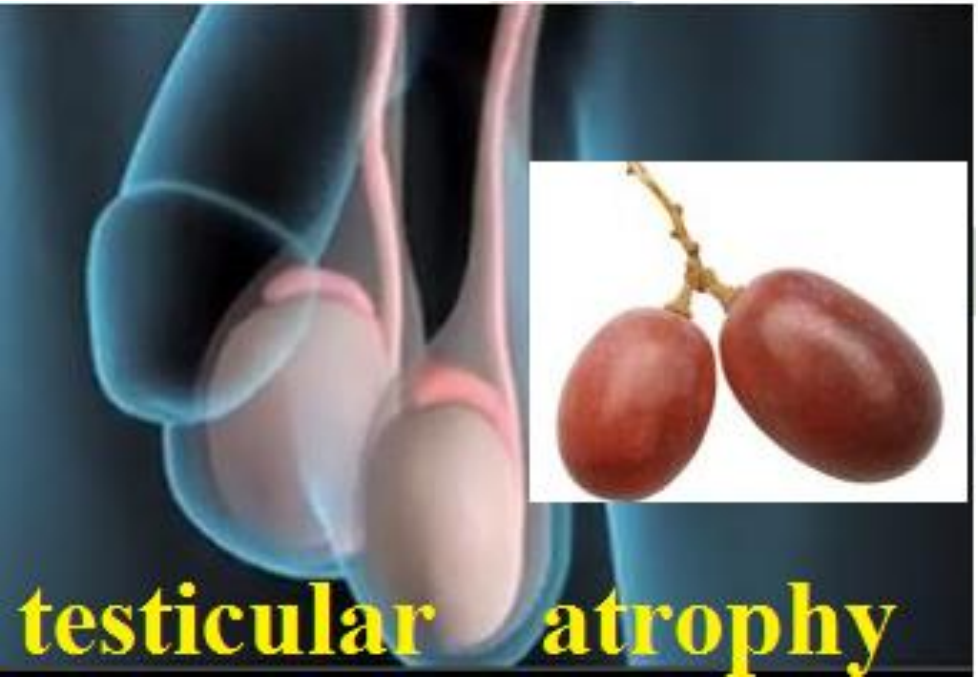
palmer erythema

dupuytren contracture

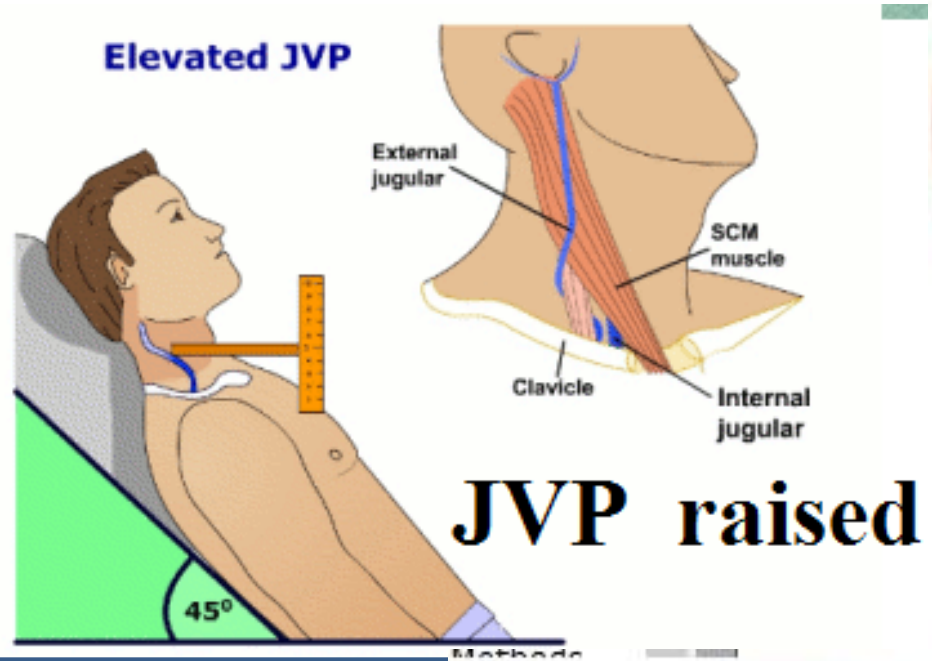
Flapping tremor(Asterixis)


ged
engorged vein

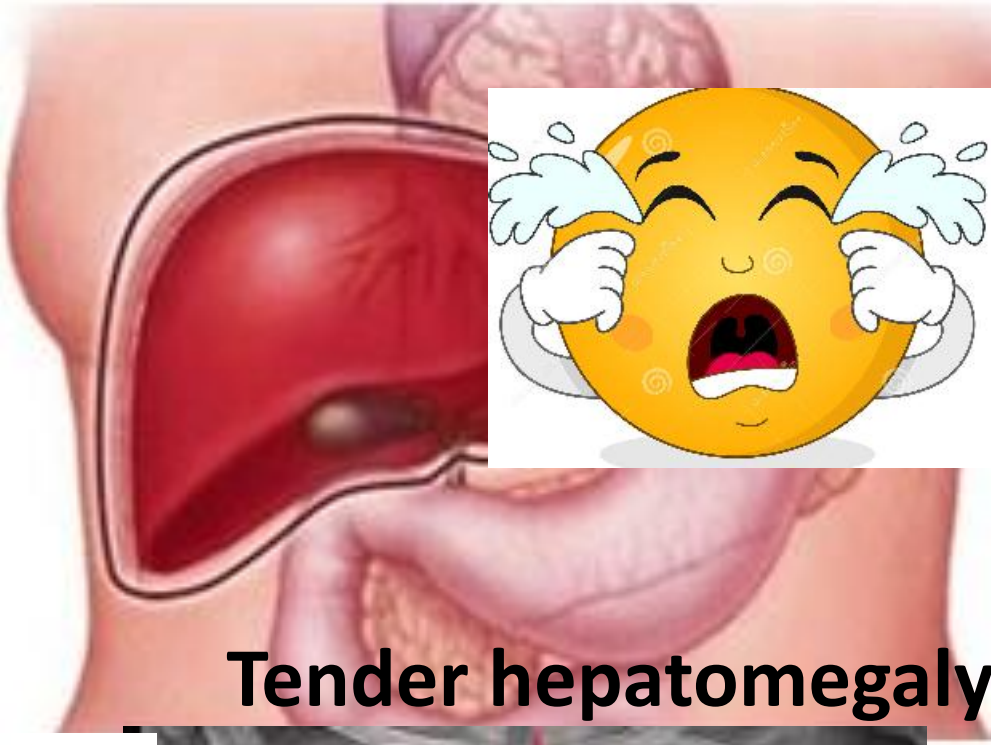

ascites


testicular atrophy


odema



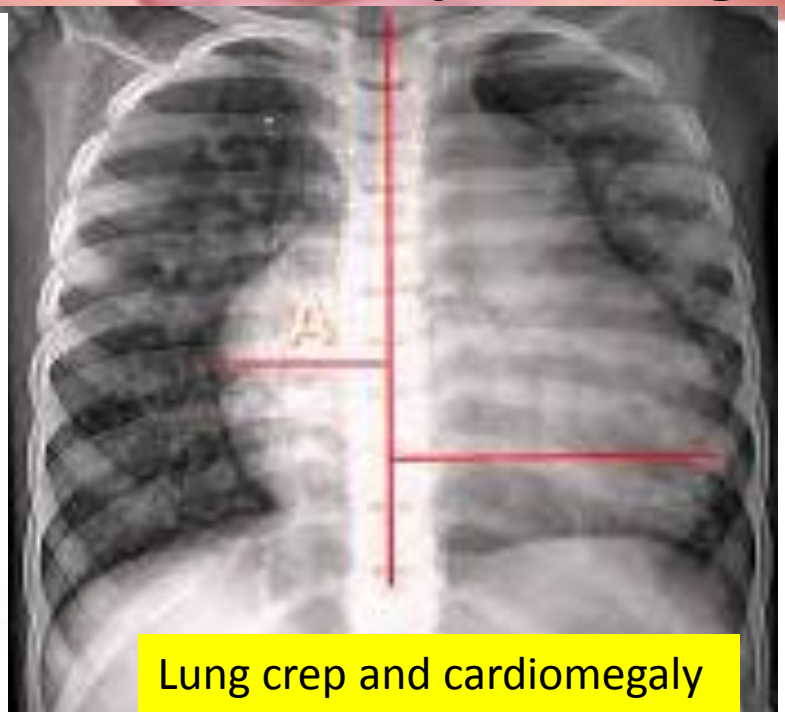
JVP raised



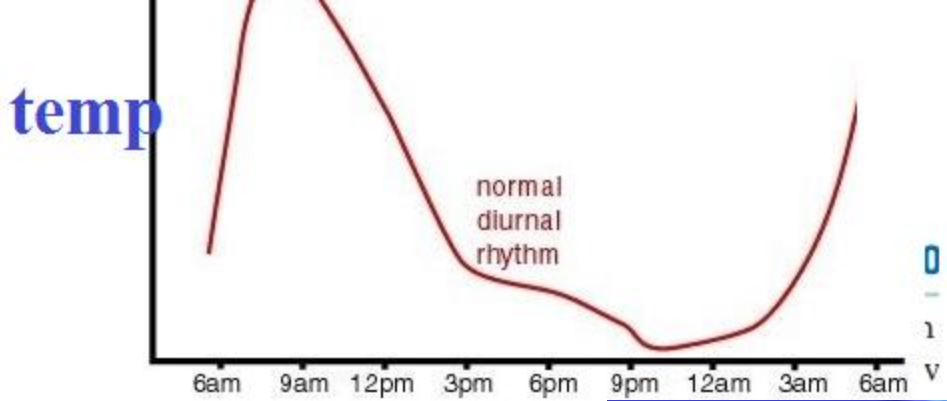
Tender hepatomegaly

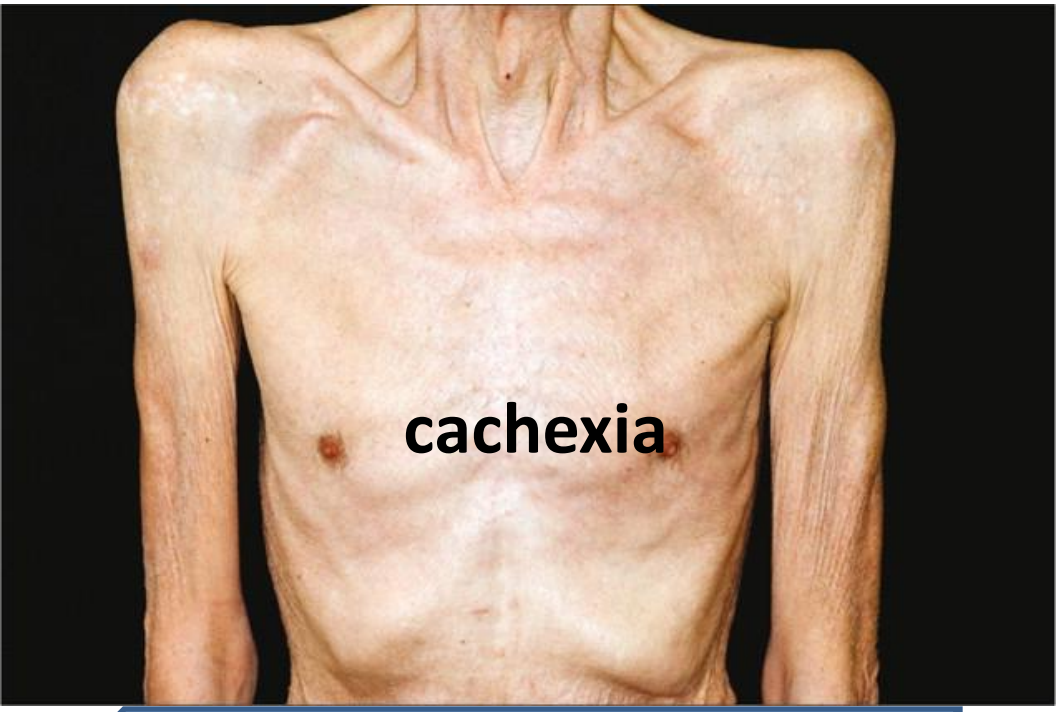
CCF

Edema

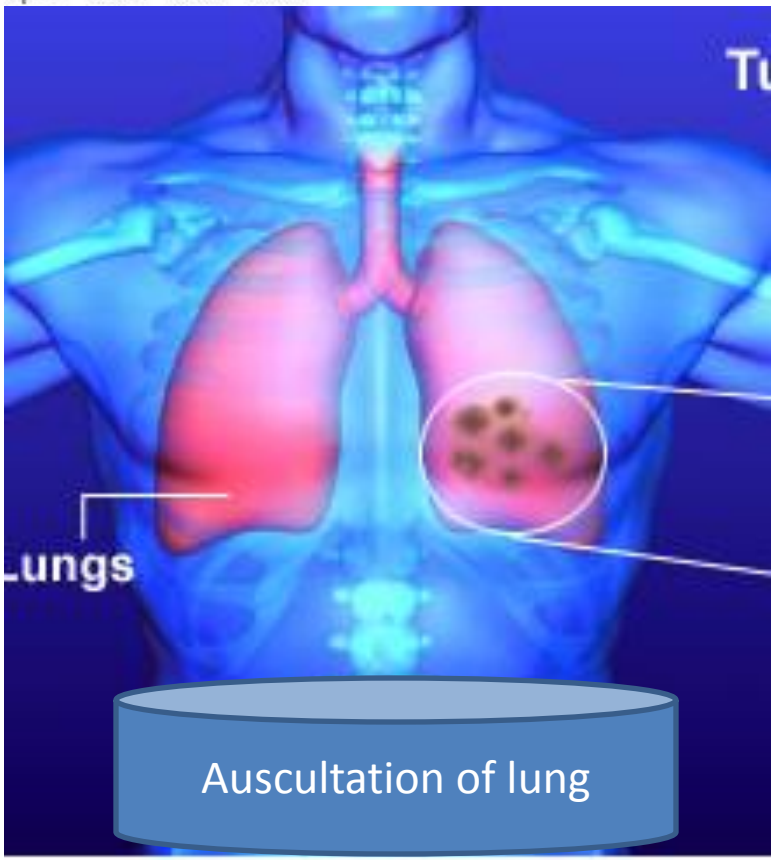


Lung crep and cardiomegaly





ABDONIAL TB



Auscultation of lung

Now what is u r diagnosis?

My diagnosis is decompensate CLD with portal hyper tension

What r the point I favor u r diagnosis?

Because I have got following stigmata of CLD in patient (u will tell what u got) such as

- Hepatic faces
- ,Jaundice,
- Spider naevi,
- Gynaecomascia ,
- Loss of body and pubic hair,
- Palmer erythema ,
- Leukonychia ,
- Oedema and
- engored vein

Why u told that it is Decompensated CLD?

As because ascites and jaundice are the sign of decompensation
(Sign of decompen-jaundice, ascites, and encephalopathy)

Spleen is not palpable but why u told CLD with portal HTN?

Spleen may not palpable due to huge ascites and spleen is only palpable when it becomes twice of his normal length . so spleen may enlarge which may not be palpable

Other sign of portal hypertension are:

Ascites and engorged vein on abdomen with up ward direction
That why we called it decompensates CLD with portal HTN

Box -a

What are sign of hepatic insufficiency?

- Hepatic faces (sunken eye, Malar prominent)
- Jaundice
- Flapping tremor
- Gynaecomastia
- In case of female breast atrophy
- Spider nevi
- Loss of body and pubic hair
- In hand
  - leukonychia.
  - Dupuytren's contracture
  - Palmar erythema
- Testicular atrophy

When will u called the testes are atrophied?

If the testes are soft, small and loss of pain sensation.

Box- b

What are the signs of portal hypertension?

To remember it keep mind SEA

S—Slepnomegaly

E—Engorged vein

Abdomen –

Above umbilicus direction of flow – upward

Below umbilicus direction of flow – down ward

Caput medusa –arround the umbilicus, direction of flow – away from the umbilicus

Esophageal varices –

Clinically –haematomesis and malaena

Via upper GIT endoscopy

A—Ascites

Other •

Fetor hepaticus ,

Hepatic encephalopathy

If u got a spider nevi following question may be asked ?

- Spider telangiectasia is a central arteriole from which small vessels radiate.
- Site : usually found only above the nipples along the area of superior venacava distribution
- Normally found: 1or 2 in 2 % people
- Cause due to: hyper dynamic circulation . in case of CLD due to access oestrogen as metabolism of oestrogen decreased by diseased liver.

  Other cause pregnancy , viral hepatitis ,OCP , thrytoxicosis ,
- **How will u see it**

  With the help of pin head or glass slide . ask the patient to sit down and see above the nipple front and back and also both upper limb
- **How will differentiate between purpura and spider nevi**
  - Purpura does not blanch on pressure (as it extravascular)

Spider nevi : Blanch on pressure and when release the pressure it will reappear

What is gynaecomastia?

Enlargement of male breast tissue due to proliferation of glandular component:

How will u see gynaecomastia?

- First u sees with palm of the hand only gently rubbing over the breast.
- Then try feel the glandular tissue of breast simply squeezing breast with pulp of the fingers

What r the Causes of gynaecomastia ?

To remember --- $BLAST_3$

B—Bronchogenic carcinoma

L—chronic liver disease

A—Adrenal carcinoma

S—spirolactone

T_1--Testicular tumour (leydig cell),

T_{2--} Testicular failure (trauma, orchitis, radiation)

T_{3---}Thrytoxicosis

What is the mechanism of gynaecomastia

Mechanism: Either due to increase activity of oestrogen or decrease activity of testosterone

Name some drug responsible gynaecomastia

Spirolactone , cemitidine , digoxin

Cause of gynaecomastia is in CLD ?

Due CLD it self @ drugs spirolactone

Painful gynaecomastia found in :

Spirolactone

Why this not CCF?

The patient have only Generalized edema with ascites

Cardinal feature of CCF is absent:

- JVP not raised
- No tender hepatomegaly

……..X……

Other feature of Right ventricular hypertrophy also absent such

- Left para sternal heave
- TR

Also absent of Sign of Pulmonary HTN

- Palpable P_2 & loud p2
- Other murmur

Also absent the following sign :

- Lung crep ++
- Vesicular breath sound with prolong expiration.

If the patient have only ascites without generalized edema:

- CLD
- Think for abdominal TB
- Abdominal malignancy with peritoneal sidling

In case of abdominal TB:

- History of long standing low grade fever
- Weight loss
- Doughy feeling
- HO recurrent sub. acute obstruction
- Alteration bowel habit

In case abdominal malignancy with peritoneal sidling

- If u exclude CLD and CCF first
- Then TB exclude
- Then think malignancy

See

- Virchows gland –
- Lymphoadenopathy
- Alteration of bowel habit

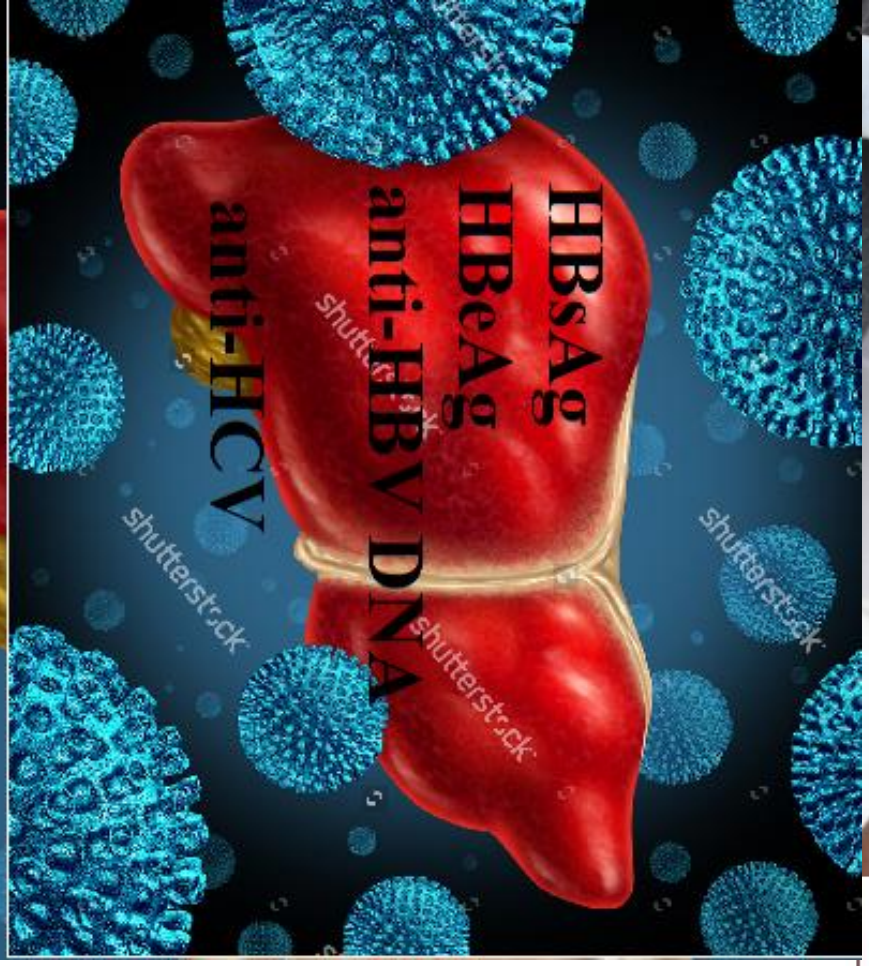
Investigation

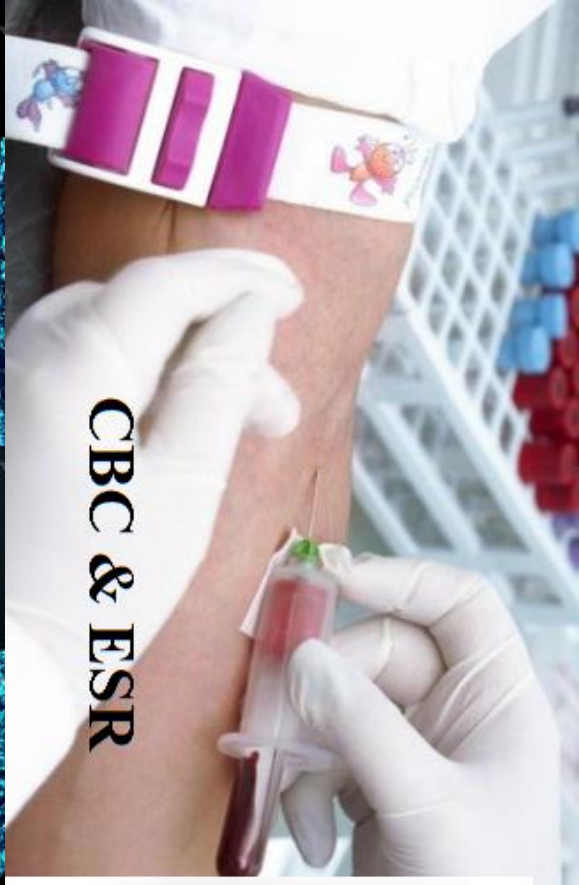
CBC	High ESR -- TB	
	Anaemia –Malignancy	
Liver function test	ALT,AST ,PT	
	AG ratio	
Viral marker	HBsAg HBeAg Anti-HBV DNA	
	Anti- HCV	
Renal function	s.Creatinine	
	urine RME albumin , RBC	
	24 hr urinary protein	
	Urinary ACR	
USG	Liver coarese , spleeno megaly Ascites	CLD
	Gut thickening	TB
	SOL (Space occupying lesion)	Secondary's
CXR	TB --	
	cardiomegaly and effusion	HF

ECG a	HEART FAILURE
ECHO	

Ascetic fluid study	• Transudative and SAAG > 1 .1 –CLD
	• Exudative ---incase of TB & Malignancy
	• Color –of fluid
	  ○ Serous –CLD
	  ○ Straw –TB
	  ○ Haemorrhagic –malignancy

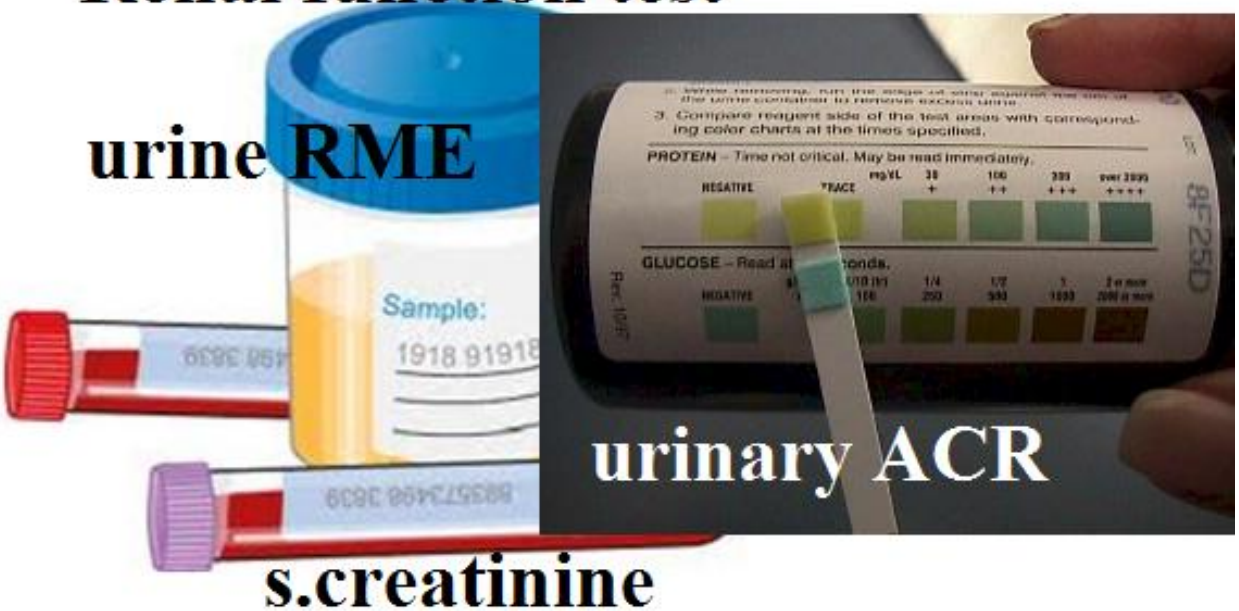
	ADA--↑--TB
Endoscopy of upper GIT	Endoscopy of To see the varices
Colonoscopy	iliocaecal TB , ca colon
Barrium follow through	TB
Liver biopsy	CLD
Liver fibroscan	
Renal biopsy	nephrotic syndrome
Tumor marker	Ca125 , &-fetoprotein , CEA, Ca-19.9
CT scan abdomen	Malignancy
Diagnostic Laparoscopy and laparotomy	





Renal function test

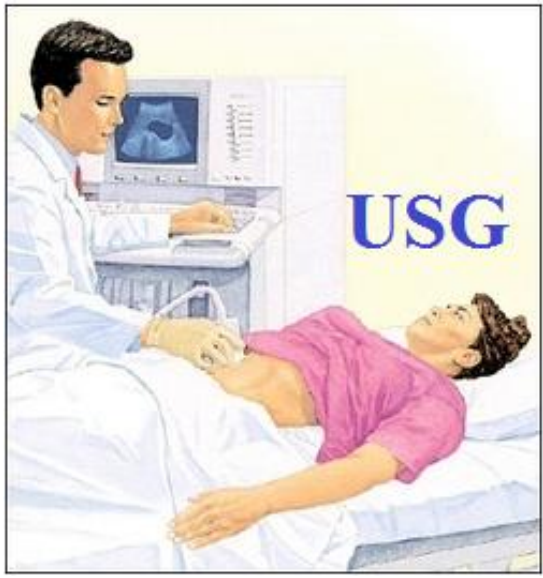
urine RME

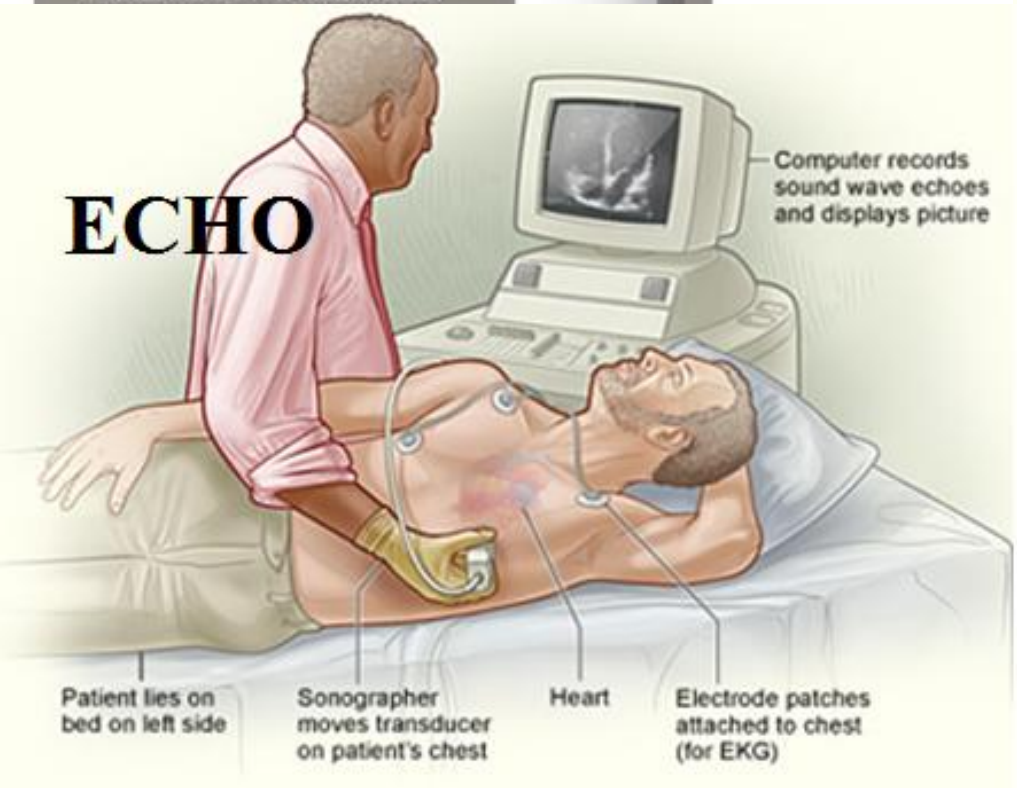


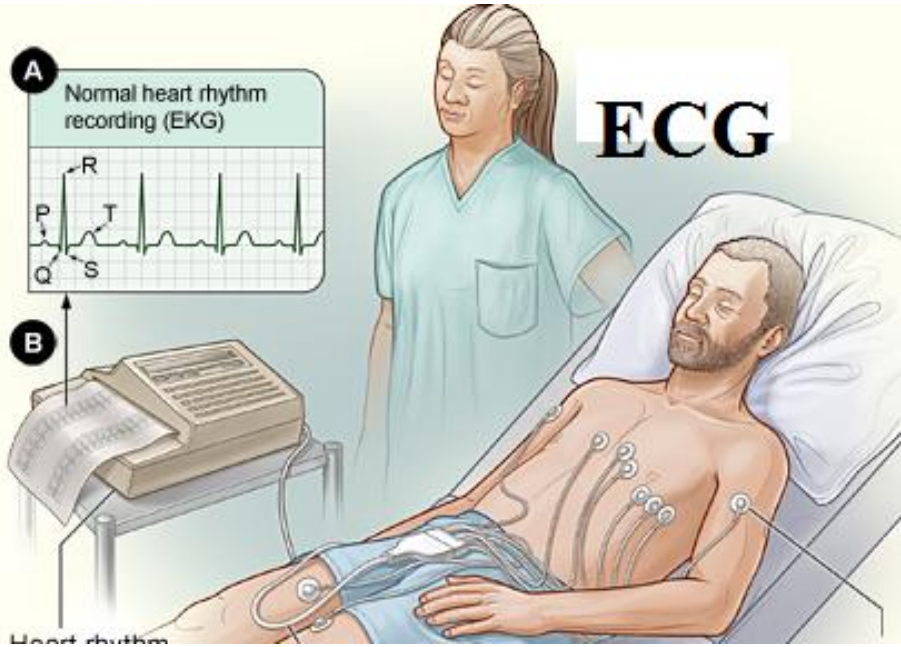
s.creatinine

ascite fluid study

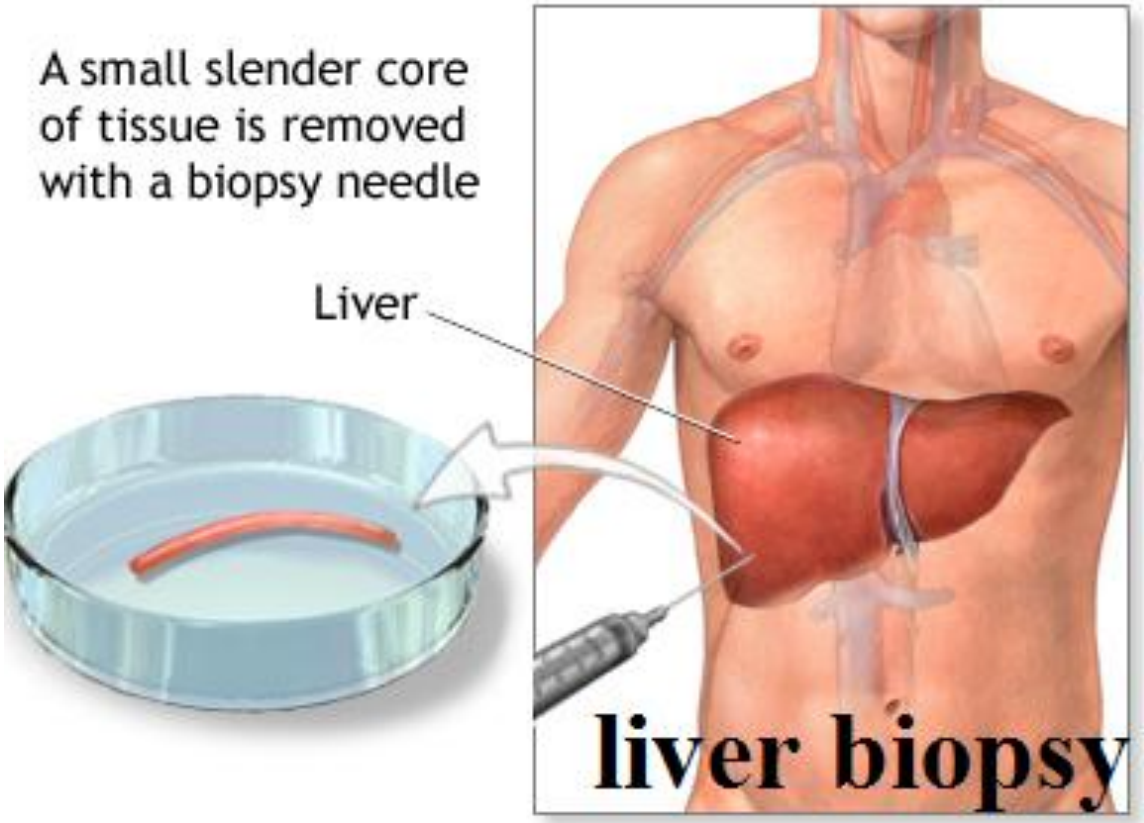
endoscopy of upper git

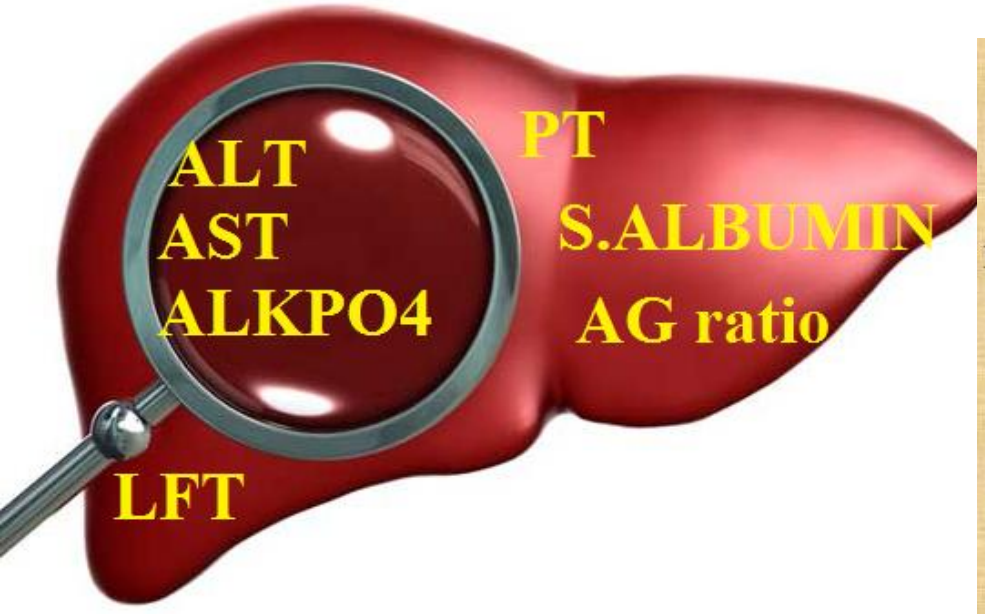


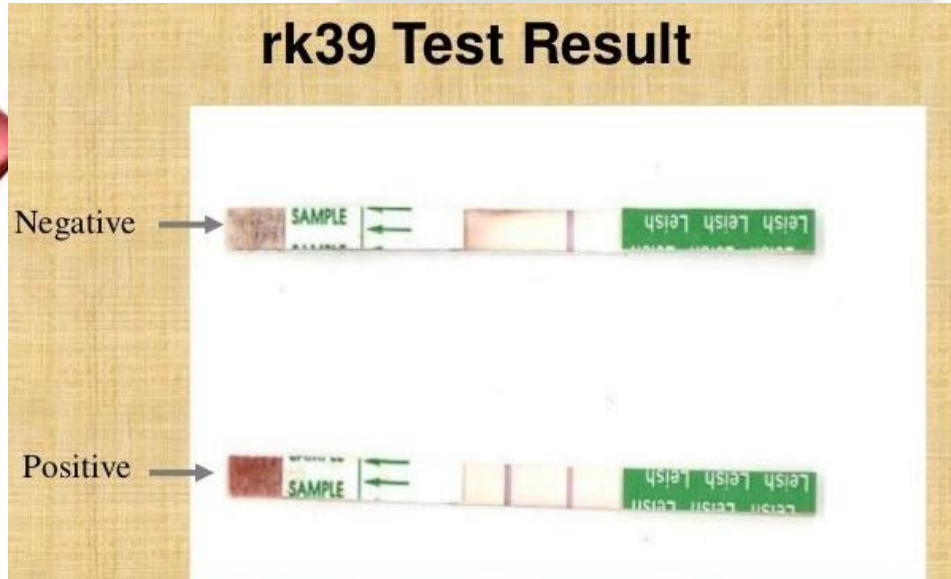


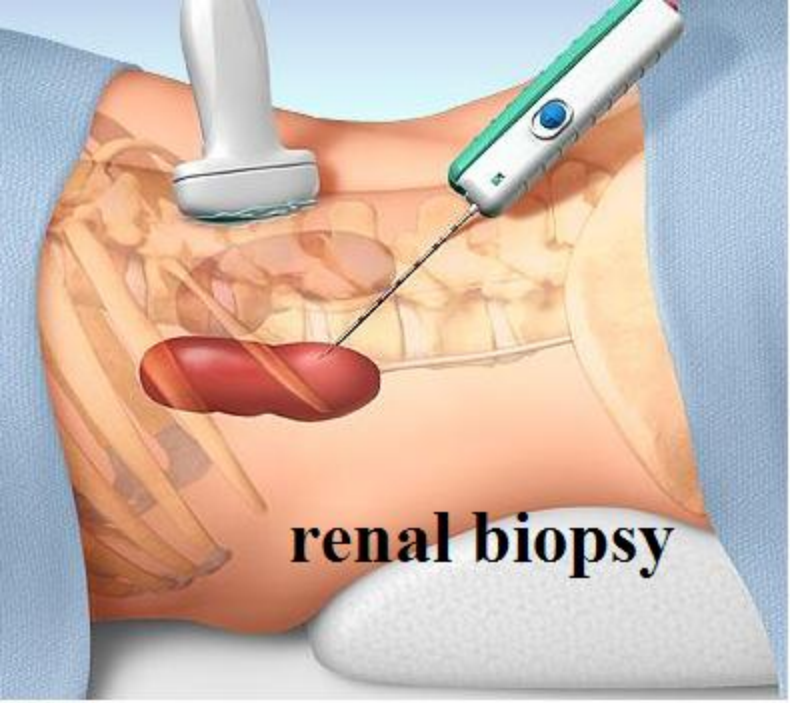


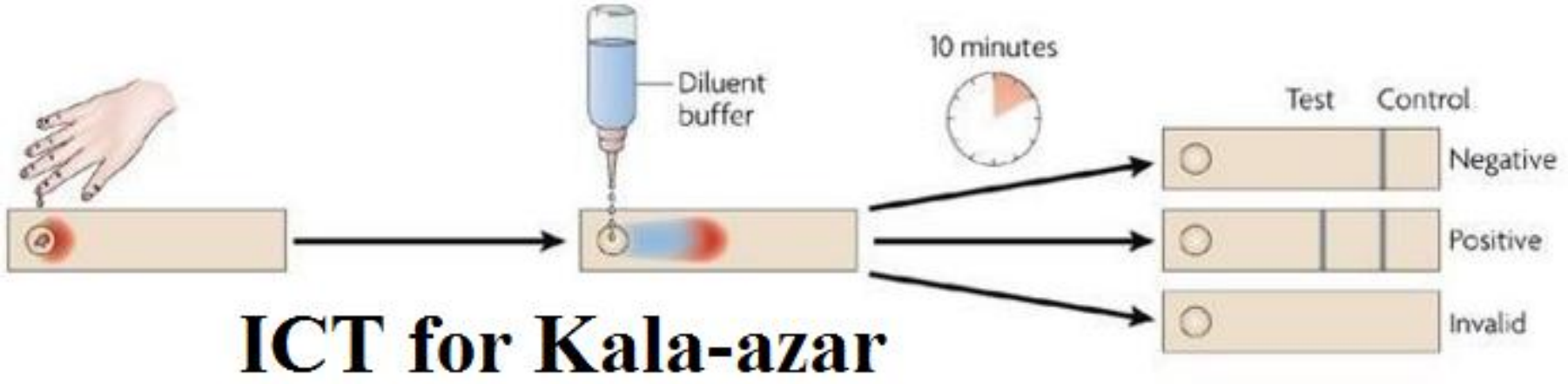

COLONOS COPY


A small slender core of tissue is removed with a biopsy needle
Liver
liver biopsy


ALT
AST
ALKPO4
PT
S.ALBUMIN
AG ratio
LFT


rk39 Test Result
Negative
SAMPLE
Positive
SAMPLE





ICT for Kala-azar

bone marrow

ILIAC CREST

STERNUM